

2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09)

Full-scale Methodology Report

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Executive Summary

The 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09), conducted for the U.S. Department of Education's National Center for Education Statistics (NCES), collected information primarily about students' education and employment in the first year following receipt of their bachelor's degree.

This report describes the methodology and findings of the B&B:08/09 data collection, which included a student interview, a transcript data collection, and an administrative data records match.

Sample Design

The target population¹ for the B&B:08/09 study was students who completed degree requirements for a bachelor's degree between July 1, 2007 and June 30, 2008, and who were awarded their bachelor's degree by June 30, 2009, from a postsecondary institution in the United States or Puerto Rico. All sampled students were initially identified as potential bachelor's degree recipients in the 2008 National Postsecondary Student Aid Study (NPSAS:08).

At the conclusion of the B&B:08/09 data collection, the B&B:08 cohort included 17,160 eligible sample members. Of this sample, 15,050 were considered interview respondents, 16,070 were considered transcript respondents, and 14,010 were considered combined interview and transcript respondents.

Student Interview

The B&B:08/09 student interview was designed as a single web-based instrument to be used for web, telephone, and field respondents. Several methodological features were embedded in the instrument to minimize mode effects, such as extensive help text on every form, warnings to alert sample members when a response fell outside a predetermined range of likely responses, and conversion text to encourage responses to critical items when sample members did not provide a response.

This follow-up interview for the B&B:08 cohort captured respondent information from the time period of July 2008 through June 2009 and included seven sections: Eligibility, Undergraduate Education, Postbaccalaureate Education/Training, Postbaccalaureate Employment, Kindergarten–12th Grade (K–12) Teaching, Student Background, and Locating. The interview was administered in one of three modes: web, telephone, or field. An abbreviated Spanish interview was also provided.

The data collection design for B&B:08/09 involved several stages. The initial process of locating sample members involved batch-locating activities to update sample members' address and telephone information from several sources. In addition, sample members and their parents were sent an initial mailing to collect updated contact information.

Once the initial round of locating was completed, sample members were sent information regarding study participation, and the data collection period began. Data collection was conducted in three phases. Sample members who completed interviews during the early response phase (first phase) and the nonresponse conversion phase (last phase) were offered an incentive of \$30. Sample

¹ The target population consists of all students or institutions in the survey population, and is the population to which inferences are made.

Executive Summary

members who completed interviews during the production (middle phase) were not offered an incentive. Base-year nonrespondents were offered \$50 to complete the interview in the early response and nonresponse conversion phases.

Of the 17,170 sample members included in the B&B:08/09 student interview data collection, 16,050 (93 percent) were successfully located, and 15,090 either partially or fully completed an interview. The response rate was 88 percent among the eligible sample and was 94 percent among those sample members who were successfully located. The majority of completed interviews (12,240) were obtained in web mode, wherein respondents accessed and completed the interview online.

The B&B:08/09 interview took approximately 28 minutes to complete. On average, web respondents completed the interview in 26.6 minutes, telephone respondents completed the interview in 33.5 minutes, and field respondents completed the interview in 31.1 minutes.

An evaluation of the quality of the data provided by the B&B:08/09 student interview showed that methodological features, such as help text and conversion text built into the instrument and training and supervision of interviewing staff, aided in the successful administration of the interview.

Data collection quality control procedures for the student interview included frequent monitoring of telephone interviewers, a help desk that tracked and resolved difficulties encountered by sample members attempting to complete the web interview, and quality circle meetings and a debriefing for interviewers and tracers. Feedback from these procedures provided useful information for consideration when planning future administrations of B&B.

Transcripts

Postsecondary transcripts were collected as part of B&B:08/09. Transcripts were requested from the institution where B&B sample members completed their bachelor's degree requirements during the 2007–08 academic year (their NPSAS institution), and if this institution had any transcripts for any transfer schools previously attended, the transfer transcripts were requested, as well. To ease burden on participating institutions, the B&B:08/09 transcript collection was combined with the transcript collection for the 2004/09 Beginning Postsecondary Student (BPS:04/09) Longitudinal Study. Together, these transcript collections are referred to as the 2009 Postsecondary Education Transcript Study (PETS:09).

Multiple transcript submission methods were available to institutions, including several secure electronic methods, fax, and FedEx. Information and instructions were available on a study website and institution contacting staff members were also available to assist institution staff with transcript submissions and questions about the study. Transcripts were requested from 1,100 postsecondary institutions attended by sample members that were reported by sample members in the B&B:08/09 interviews. Of these institutions, 1,020 (93 percent) provided transcripts for the cohort.

Transcript data were collected via a keying and coding process that made use of a specially designed keying and coding system (KCS) and a staff of trained keyer/coders. The KCS was divided into sections based upon the categories of data found on transcripts, including case information, schools and terms, academics, tests, degrees and majors, and courses. A PETS coder was developed for the coding of courses by combining the 2010 NCES Classification of Instructional Programs and the 2003 College Course Map.

Keying and coding of the NPSAS institution transcript was performed for 16,070 sample members. When a sample member's transcript showed courses from another institution these courses were entered into the student's transcript data file only when these credits were accepted by the bachelor's degree-awarding institution. A series of quality control procedures were put in place for keying and coding, including key-rekey and expert coder procedures to assess interrater reliability and upcoding procedures for uncodeable data and data entered as "other, specify." Kappa statistics were calculated to assess interrater reliability for multiple transcript data elements and all indicated substantial agreement between coders.

File Preparation

The data files for B&B:08/09 contain student-level data collected from student interviews and transcripts, government databases, and administrative databases. These files are available as a set of restricted research files fully documented by an electronic codebook and through the NCES online application PowerStats, which also contains variable documentation. The editing and documentation processes for each file are described in this report.

Analysis Weights

Student interview respondents for B&B:08/09 were sample members with a B&B:08/09 completed, partial, or abbreviated interview. Student transcript respondents were sample members who had a transcript provided by the NPSAS:08 institutions. Combined student interview and transcript respondents were both interview and transcript respondents. Weights were constructed for use in the analysis of these three types of respondents. The three analysis weights were derived from the NPSAS:08 weight, and they were adjusted for subsampling, nonresponse, and calibration to Integrated Postsecondary Education Data System Completions totals and to sums of the NPSAS:08 weights for the B&B cohort.

Variance Estimation

The B&B:08/09 sample was obtained using a complex sample design that included stratification and clustering, and special techniques were needed for variance estimates. Variables were constructed and provided on the data file for bootstrap variance estimation and for Taylor series variance estimation.

Foreword

This report describes and evaluates the methods and procedures used in B&B:08/09. B&B:08/09 is the first follow-up interview for the cohort of bachelor's degree recipients identified in NPSAS:08. Transcripts were also collected from the institution where B&B sample members completed their bachelor's degree requirements. Together, the student interview and transcript data collections represent a significant and rich data source on this cohort of bachelor's degree recipients.

We hope that the information provided in this report will be useful to interested readers. Additional information about B&B:08/09 is available on the Web at nces.ed.gov/surveys/b&b/.

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The authors are greatly indebted to the students who generously participated in the survey. Their willingness to take the time to share their information and experiences made B&B:08/09 a success.

We gratefully acknowledge the assistance of the staff members of NCES for their guidance and review in conducting the study and in preparing this document. Special thanks is also extended to the project staff members of RTI International and MPR Associates, Inc. (recently acquired by RTI).

*RTI International is a trade name of Research Triangle Institute.

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Chapter 1. Overview

This report documents the methodological procedures and evaluations of the 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09). RTI, with the assistance of MPR, conducted B&B:08/09 for the National Center for Education Statistics (NCES) of the U.S. Department of Education (Contract No. ED-05-CO-0033).

Chapter 1 describes the background, legislative authorization, and schedule and products of B&B:08/09. Chapter 2 presents the sampling details of the B&B:08 cohort and provides the definition of a B&B:08 cohort study respondent. Chapter 3 describes the development of the student interview and details of the data collection and results, and provides an evaluation of the student interview data quality. Chapter 4 describes the transcript data collection including systems for collecting, recording, and evaluating transcript data. Chapter 5 summarizes the file preparation process for the B&B:08/09 student interview and transcript data collections. Finally, chapter 6 provides information pertaining to the weighting and variance estimation procedures for B&B:08/09. Materials used during the full-scale student interview and transcript data collection are appended to the report and cited in the text where appropriate.

Throughout this document, reported numbers of sample institutions and students have been rounded to ensure the confidentiality of individual student data. As a result, row and column entries in tables may not sum to their respective totals, and reported percentages may differ somewhat from those that would result from these rounded numbers.

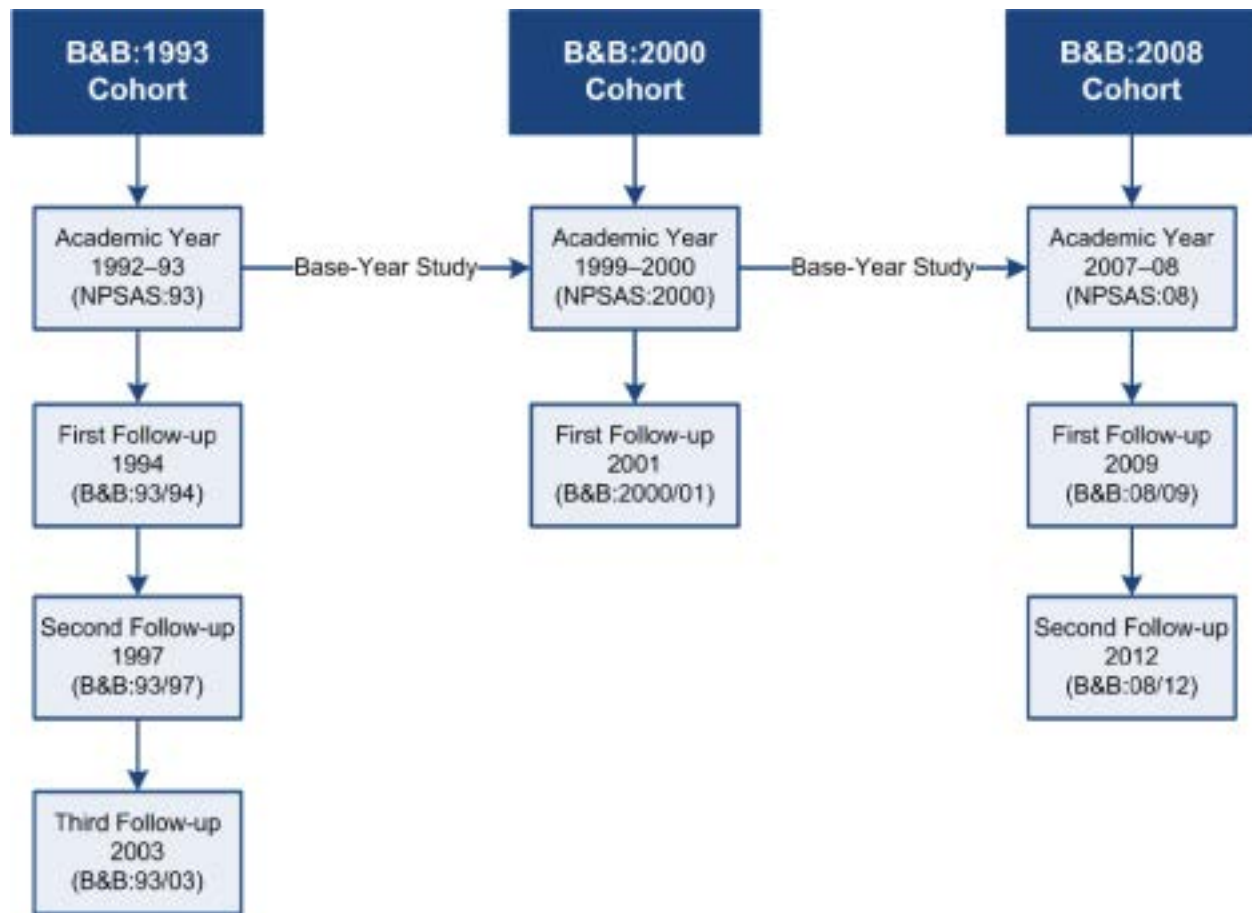
1.1 Background and Objectives of B&B

B&B is one of several NCES-sponsored studies developed to address the need for nationally representative data on key postsecondary education issues. These studies explore topics related to postsecondary access, choices, enrollment, persistence, progress, curriculum, attainment, continuation into graduate and professional school, and the benefits of postsecondary education to individuals and to society. B&B is a longitudinal spin-off of the National Postsecondary Student Aid Study (NPSAS), which is authorized by the following legislation:

- the Higher Education Act of 1965, as amended by the Higher Education Opportunity Act of 2008, 20 U.S.C. § 1015(a) (2008);
- the General Education Provisions Act, as amended, 20 U.S.C. §§ 9541 to 9548 (2007);
- the Higher Education Act of 1965, as amended by the Higher Education Amendments of 1986, 20 U.S.C. § 1070 et seq. (2007); and
- the National Education Statistics Act of 1994, as amended, 20 U.S.C. §§ 9541 to 9547 and 9573 (2007).

Once students completing their baccalaureate degrees in the NPSAS academic year are identified, the B&B series follows them to monitor their progress. Figure 1 shows the data collection timeline for the base-year and subsequent B&B follow-up studies.

Figure 1. Chronology of B&B: 1993–2012



NOTE: NPSAS = National Postsecondary Student Aid Study. B&B = Baccalaureate and Beyond Longitudinal Study
 SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Although the focus and principal content of the B&B student interviews in each of these three cohorts have remained relatively consistent, expert panels and other reviews of the interview have helped to shape and alter questions as needed for relevancy. For the B&B:08 cohort, the first follow-up interview (B&B:08/09) examined students’ workforce participation; income and debt repayment; and entry into and persistence through graduate school programs; as well as several issues specifically related to teaching, including teacher preparation, entry into and persistence in the profession, and teacher career paths. B&B also gathers extensive information on bachelor’s degree recipients’ undergraduate experiences, demographic backgrounds, expectations regarding graduate study and work, and participation in community service. See appendix C for a complete list of the data elements in the B&B:08/09 student interview and appendix D for a facsimile of the instrument.

1.2 Schedule and Products of B&B:08/09

Table 1 summarizes the schedule for B&B:08/09. Electronically documented, restricted-access research files (with associated electronic codebooks [ECBs]) and NCES online application PowerStats for public release have been constructed from data collection and will be made available to a variety of organizations and researchers. In addition to this methodology report, B&B:08/09 has produced a First Look report that provides descriptive information for the B&B:08/09 cohort,

special tabulations on issues of interest to the higher education community (as identified by NCES), and descriptive reports of significant findings for dissemination to a broad audience.

Table 1. Schedule of major activities: 2008–13

Activity	Start date	End date
Student interview		
Finalize student sample	2/9/2009	10/9/2009
Conduct web and telephone student interview data collection	7/7/2009	3/12/2010
Conduct field student interview data collection	12/9/2009	3/12/2010
Process student interview data, construct data files	7/8/2009	10/20/2010
Transcript		
Collect postsecondary catalogues and transcripts	8/1/2008	2/15/2010
Key and code transcripts	11/1/2008	3/23/2010
Process transcript data	2/2/2009	7/30/2010
Create transcript derived variables	12/1/2009	1/31/2012
Data products		
Methodology report	9/9/2009	8/31/2013
First Look report	12/21/2009	7/31/2011
PowerStats	11/4/2010	7/31/2011
Special tabulations	3/1/2010	1/6/2012
Descriptive reports	7/1/2010	3/16/2012

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Chapter 2. Sampling

Identification of the B&B:08/09 sample required a multi-stage process that began with selection of the NPSAS:08 sample of institutions and was followed by selection of students within institutions. The final stage confirmed the B&B:08 cohort eligibility of sample members identified via NPSAS:08 as baccalaureate recipients during the 2007–08 academic year.

2.1 Respondent Universe

To be eligible for inclusion in the B&B:08 cohort, students must have been part of the student universe at an institution included in the NPSAS:08 institution universe. The definitions of the NPSAS:08 institution and student universes are presented below.

2.1.1 Institution Universe for NPSAS:08

The institutions eligible for NPSAS:08 were required meet all criteria for distributing federal Title IV aid during the 2007–08 year, including;

- offering an educational program designed for persons who have completed a high school education;
- offering at least one academic, occupational, or vocational program of study lasting at least 3 months or 300 clock hours;
- offering courses that were open to persons other than the employees or members of the company or group (e.g., union) that administers the institution; and
- being located in the 50 states, the District of Columbia, or Puerto Rico.

Institutions providing only vocational, recreational, or remedial courses or only in-house courses for their own employees were excluded. U.S. service academies were excluded because of their unique funding/tuition base.

These institution eligibility conditions are consistent with previous NPSAS studies, with two exceptions. First, the criterion of being eligible to distribute Title IV aid was implemented beginning with NPSAS:2000,¹ and second, the previous NPSAS studies excluded institutions that offered only correspondence courses. NPSAS:08 included such institutions if they were eligible to distribute Title IV student aid.

2.1.2 Student Universe for NPSAS:08

Students eligible for NPSAS:08 were those who were enrolled in an eligible NPSAS institution, and who satisfied both of the following eligibility requirements:

- they were enrolled in any of the following: (a) an academic program, (b) at least one course for credit that could be applied toward fulfilling the requirements for an academic degree, or (c) an occupational or vocational program that required at least 3 months or 300 clock hours of instruction to receive a degree, certificate, or other formal award; and

¹ An indicator of Title IV eligibility has been added to the analysis files from earlier NPSAS studies to facilitate comparable analyses.

- they were not concurrently or solely enrolled in high school, or in a GED or other high school completion program.

2.2 Base-Year Study (NPSAS:08)

The sampling design for the base-year study, NPSAS:08, was a two-stage design in which eligible institutions were selected in the first stage and eligible students, within eligible responding sample institutions, were selected in the second stage. The NPSAS:08 sampling process is described in the following subsection. For detailed information on the NPSAS:08 sample allocation and statistical design formulas, see appendix A.

2.2.1 Institution Sample for NPSAS:08

NPSAS:08 constructed its institution sampling frame from the IPEDS:2004–05 Institutional Characteristics, Fall Enrollment, and Completions files. The institutions on the sampling frame were partitioned into 46 institution strata based on institution level and control, highest level of offering, and proportion of bachelor’s degrees awarded in education.² NPSAS:08 also included state-representative undergraduate student samples for four degree-granting institution sectors (public 4-year; public 2-year; private nonprofit 4-year; and private for-profit 4-year) in six states: California, Georgia, Illinois, Minnesota, New York, and Texas.³

Institutions were selected using Chromy’s sequential probability minimum replacement (pmr) sampling algorithm (Chromy 1979), which is similar to systematic sampling. To avoid multiple selections of sample institutions, those with expected frequencies of selection greater than unity (1.00) were selected with certainty (certainty schools). Initially, a sample of about 1,630 institutions was selected in fall 2006 so that these institutions could be notified of their selection early and to allow a separate field test sample to be selected from the remaining institutions on the sampling frame. In summer 2007, the sample was refreshed using the IPEDS:2005–06 Institutional Characteristics, Fall Enrollment, and Completions files to include any newly eligible institutions within the sampling frame to ensure that the sample was representative of the current population. This process added about 10 institutions to the sample. In fall 2007, the decision was made to include state-representative undergraduate student samples for four degree-granting institution sectors (public 4-year; public 2-year; private nonprofit 4-year; and private for-profit 4-year) in the six states listed above. To accomplish this, a supplemental sample was drawn and added to the existing sample. The final NPSAS:08 sample included 1,960 institutions.

The next step of the institution sampling process involved determining the eligibility of the sample institutions. Of the total institution sample ($n = 1,960$), about 1,940 (99 percent) were found to be eligible to participate in NPSAS:08. Of those, approximately 1,730 institutions (a weighted response rate of 90 percent among the eligible sample⁴) provided student enrollment lists for use in the second stage of sampling (i.e., selecting the student sample). Table 2 shows the number of institutions that were sampled, the number of eligible institutions, and the count and unweighted and weighted percentages of institutions providing enrollment lists, by institution characteristics.

² The proportion of bachelor’s degrees awarded in education is used to ensure sufficient numbers of sample students receiving a bachelor’s degree in education. Such students are an important analysis domain for B&B.

³ These six states were selected based on (1) the size of undergraduate enrollment in the four sectors; (2) prior inclusion in the NPSAS:04 twelve-state sample with high levels of cooperation and participation in that survey; and (3) unique or recently changed tuition and state grant policies that provided opportunities for comparative research and analysis.

⁴ The weight described here is a base weight.

Table 2. NPSAS:08 sampled and eligible institutions and enrollment list participation rates, by institution characteristics: 2007–08

Institution characteristics ¹	Sampled institutions	Eligible institutions	Institutions providing lists		
			Number	Unweighted percent	Weighted percent ²
All institutions	1,960	1,940	1,730	89.0	90.1
Institution level					
Less-than-2-year	130	120	100	82.6	83.2
2-year	570	560	510	89.7	90.7
4-year non-doctorate-granting	700	700	630	89.7	91.9
4-year doctorate-granting	560	560	500	88.8	88.6
Institution control					
Public	960	960	880	91.9	91.2
Private nonprofit	650	640	560	87.4	86.7
Private for-profit	350	340	290	83.6	88.2
Institution type					
Public					
Less-than-2-year	20	20	20	90.9	93.2
2-year	450	450	410	91.7	91.2
4-year non-doctorate-granting	200	200	190	94.4	95.4
4-year doctorate-granting	290	290	260	90.7	89.2
Private nonprofit					
Less-than-4-year	20	20	20	84.2	84.7
4-year non-doctorate-granting	370	370	320	88.2	87.9
4-year doctorate-granting	260	260	230	86.5	85.9
Private for-profit					
Less-than-2-year	100	90	70	80.4	81.0
2-year or more	260	250	210	84.8	90.2

¹ Institution characteristics are based on data from the sampling frame, which was formed from IPEDS:2004–05 and freshened from IPEDS:2005–06.

² The weight described in this column is a base weight.

NOTE: Detail may not sum to totals because of rounding. NPSAS = National Postsecondary Student Aid Study. IPEDS = Integrated Postsecondary Education Data System.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2007–08 National Postsecondary Student Aid Study (NPSAS:08).

2.2.2 Student Sample for NPSAS:08

Sample institutions provided lists of their eligible students enrolled during the 2007–08 academic year, and these lists served as the frame for selecting the student sample. Student enrollment lists were sampled on a flow basis, using equal probability stratified systematic sampling. Business majors were undersampled to ensure that the sample did not consist primarily of business majors, while science, technology, engineering, and mathematics (STEM) majors; Science and Mathematics Access to Retain Talent (SMART) grant recipients; and Academic Competitiveness Grant (ACG) recipients were oversampled to allow for sufficient numbers for analysis. There were 20 student strata, as follows:

1. in-state potential baccalaureate recipients who were business majors;
2. out-of state potential baccalaureate recipients who were business majors;

3. in-state potential baccalaureate recipients who were STEM majors and SMART grant recipients;
4. out-of-state potential baccalaureate recipients who were STEM majors and SMART grant recipients;
5. in-state potential baccalaureate recipients who were STEM majors and not SMART grant recipients;
6. out-of-state potential baccalaureate recipients who were STEM majors and not SMART grant recipients;
7. in-state potential baccalaureate recipients in all other majors who were SMART grant recipients;
8. out-of state potential baccalaureate recipients in all other majors who were SMART grant recipients;
9. in-state potential baccalaureate recipients in all other majors who were not SMART grant recipients;
10. out-of state potential baccalaureate recipients in all other majors who were not SMART grant recipients;
11. in-state other undergraduate students who were SMART grant recipients;
12. out-of-state other undergraduate students who were SMART grant recipients;
13. in-state other undergraduate students who were Academic Competitiveness Grant (ACG) recipients;
14. out-of-state other undergraduate students who were ACG grant recipients;
15. in-state other undergraduate students who were not SMART or ACG grant recipients;
16. out-of-state other undergraduate students who were not SMART or ACG grant recipients;
17. masters students;
18. doctoral students;
19. other graduate students; and
20. first-professional students.

For each student sampling stratum, the enrollment list was sampled at a rate designed to provide approximately equal student-level probabilities. To more accurately estimate the overall sample yield, student sampling rates were revised after sufficient lists had been received. The final sample included 137,800 students. Approximately 96 percent of the final sample ($n = 132,800$) was determined to be eligible for NPSAS. On the completion of data collection, 96 percent of the eligible sample ($n = 127,700$) was determined to have sufficient key data to meet the definition of a study respondent. A study respondent was defined as any sample member who was determined to be eligible for the study and, minimally, had valid data from any data source, including an institution record abstraction (computer-assisted data entry [CADE]), the NPSAS:08 student interview, and record matching against several administrative databases (e.g., the U.S. Department of Education's Central Processing System [CPS]) for the following:

- student type (undergraduate or graduate/first professional);
- date of birth or age;
- gender; and
- at least 8 of the following 15 variables:
 - dependency status;
 - marital status;
 - any dependents;
 - income;
 - expected family contribution;
 - degree program;
 - class level;
 - baccalaureate status;
 - months enrolled;
 - tuition;
 - received federal aid;
 - received nonfederal aid;
 - student budget;
 - race; and
 - parent education.

Table 3 shows the number of students sampled, the number of eligible students, and the unweighted and weighted percentages of study respondents, by institution characteristics. See appendix A for more information on the NPSAS:08 institution and student sampling details.

Table 3. NPSAS:08 sampled and eligible students and response rates, by institution characteristics: 2007–08

Institution characteristics ²	Sampled students	Eligible students ³	Study respondents ¹	
			Unweighted percent	Weighted percent ⁴
All students	137,800	132,800	96.2	95.7
Institution level				
Less-than-2-year	8,820	7,950	95.0	96.7
2-year	43,460	40,770	93.3	92.5
4-year non-doctorate-granting	37,930	37,140	97.8	97.6
4-year doctorate-granting	47,590	46,940	97.6	97.6
Institution control				
Public	87,470	84,240	95.3	94.9
Private nonprofit	32,760	31,950	97.7	97.3
Private for-profit	17,570	16,610	97.6	98.5
Institution type				
Public				
Less-than-2-year	1,730	1,480	90.0	88.9
2-year	39,340	37,010	92.8	92.2
4-year non-doctorate-granting	16,120	15,850	98.0	98.1
4-year doctorate-granting	30,280	29,910	97.3	97.4
Private nonprofit				
Less-than-4-year	2,080	1,790	97.0	97.7
4-year non-doctorate-granting	14,200	13,930	97.3	96.8
4-year doctorate-granting	16,480	16,230	98.0	97.8
Private for-profit				
Less-than-2-year	6,610	6,050	96.1	97.6
2-year or more	10,960	10,560	98.5	98.7

¹ A study respondent is defined as any eligible sample member for whom sufficient data were obtained from one or more sources, including student interview, institution records, and the U.S. Department of Education's Central Processing System (CPS).

² Institution characteristics are based on data from the sampling frame formed from IPEDS:2004–05 and freshened from IPEDS:2005–06.

³ Sample member eligibility was determined during the student interview or from institution records in the absence of a student interview.

⁴ The weight described in this column is a base weight.

NOTE: Detail may not sum to totals because of rounding. NPSAS = National Postsecondary Student Aid Study. IPEDS = Integrated Postsecondary Education Data System.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2007–08 National Postsecondary Student Aid Study (NPSAS:08).

In previous NPSAS studies that derived a B&B cohort, lists of potential baccalaureate recipients were collected with the student list of all enrolled undergraduate and graduate/first-professional students. However, these baccalaureate lists often could not be provided until late in the spring or in the summer when baccalaureate recipients could be positively identified, which negatively affected the data collection schedule. To encourage an earlier receipt of enrollment lists, 4-year institutions were asked to include an indicator (B&B flag) of students who had received or would potentially receive a baccalaureate degree during the NPSAS year (between July 1, 2007, and June 30, 2008).⁵ Institutions were instructed to make this identification before spring graduation. Four-year institutions were also asked to include an indicator of class level for undergraduates (first

⁵ The B&B flag had values of “yes,” “no,” and “don't know.”

year, second year, third year, fourth year, or fifth year). From NPSAS:2000, it was estimated that about 55 percent of the fourth- and fifth-year students would be baccalaureate recipients during the NPSAS year and that about 7 percent of third-year students would also be baccalaureate recipients. This class-level indicator was used when the B&B flag was not provided for any students. These two indicators were used instead of requesting a separate baccalaureate recipient list.

Because most enrollment lists were received before June 30, and many were received before April, some sample students identified by the institution as baccalaureate candidates were determined during the NPSAS interview not to be baccalaureate recipients (*false positives*). Likewise, some sample students not identified by the institution as baccalaureate candidates were determined during the NPSAS interview to have received baccalaureate degrees (*false negatives*) during the specified timeframe.

2.3 First Follow-up Study (B&B:08/09)

The primary task of the B&B:08/09 sample definition process was to confirm or reject a potential respondent's baccalaureate status.

Individuals eligible for the B&B:08 cohort were those who completed requirements for a bachelor's degree from a NPSAS:08-eligible institution between July 1, 2007, and June 30, 2008, and were awarded their baccalaureate degree by the institution from which they were sampled no later than June 30, 2009. Eligibility for the B&B:08 cohort was based primarily on information obtained from the student's transcript. Transcripts were collected prior to the B&B:08/09 interview under the 2009 Postsecondary Education Transcript Study (PETS:09). Lacking a transcript, eligibility was based on responses provided during the NPSAS:08 student interview. Without either the transcript or the interview, eligibility was based on the student's institution record obtained through NPSAS:08 CADE or the enrollment list provided by the NPSAS:08 institution at the time of student sampling. Also, the transcript and NPSAS:08 interview data were reviewed to determine eligibility for students who confirmed in the NPSAS:08 interview that they received their bachelor's degree but whose transcript did not indicate degree receipt. If such students were deemed to be eligible or eligibility could not definitively be determined, then they were included in the sample. The National Student Clearinghouse (NSC) data on degree completion were used to identify eligible students but could not identify ineligible students with certainty. These data were used for stratification. Table 4 shows the distribution of the 25,050 NPSAS:08 sample members who were potentially eligible for membership in the B&B:08 cohort according to their NPSAS:08 interview, CADE, and/or enrollment list status.

Table 4. Distribution of the NPSAS:08 sample members potentially eligible for B&B:08 cohort, by source of potential eligibility: 2009

Sources of potential eligibility	Number	Percent
Total	25,050	100.0
Bachelor's degree confirmed in NPSAS:08 interview	18,000	71.9
Bachelor's degree confirmed in CADE	4,630	18.5
Listed as potential bachelor's degree recipient	2,420	9.7

NOTE: Detail may not sum to totals because of rounding. NPSAS = National Postsecondary Student Aid Study.

B&B = Baccalaureate and Beyond Longitudinal Study. CADE = computer-assisted data entry.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2007–08 National Postsecondary Student Aid Study (NPSAS:08), 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Of the 18,000 students who completed the NPSAS:08 interview and were confirmed to be eligible for the B&B:08 cohort, about 84 percent (15,050) had a transcript that confirmed eligibility at the time of sampling, 6 percent (1,060) were ineligible based on transcripts, and 11 percent (1,890) did not have a transcript. Table 5 shows the transcript status of the B&B:08 cohort with baccalaureate receipt confirmed in the NPSAS:08 interview.

Table 5. Transcript status of the B&B:08 cohort with bachelor's degree confirmed in the NPSAS:08 interview

Transcript status	Number	Percent
Total	18,000	100.0
Confirmed B&B:08 eligible	15,050	83.6
Confirmed B&B:08 ineligible	1,060	5.9
No transcript	1,890	10.5

NOTE: Detail may not sum to totals because of rounding. B&B = Baccalaureate and Beyond Longitudinal Study. NPSAS = National Postsecondary Student Aid Study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2007–08 National Postsecondary Student Aid Study (NPSAS:08) and 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Additionally, transcripts were requested for the 7,050 NPSAS:08 interview nonrespondents who were either confirmed in CADE to be degree candidates or listed by the NPSAS:08 sample institution as bachelor's degree candidates. Approximately 5,150 of these NPSAS:08 nonrespondents were determined to be eligible or eligibility could not be determined for B&B:08/09 based on transcript data. In order to have full population coverage of the B&B:08/09 sample, a subsample of 500 of these 5,150 NPSAS:08 interview nonrespondents was selected. The sample was selected to maximize eligibility. The 5,150 NPSAS:08 interview nonrespondents were stratified based on study respondent, transcript, NSC, and CADE statuses. Within each stratum, the nonrespondents were first sorted by institution sector to ensure the representativeness of the sample and were also sorted by the NPSAS:08 sampling weight within sector. Then, the sample was drawn within each stratum with probabilities proportional to the NPSAS:08 sampling weight. The sampling rates used in each stratum were different in order to maximize response and eligibility rates while also representing the various types of sample members. The B&B:08/09 sample is not intended to be representative at the state level.

Based on the B&B:08/09 field test results, the highest sampling rates were among students who were NPSAS:08 study respondents, were potentially eligible based on NSC or CADE, and were confirmed eligible by the transcript. The next highest sampling rates were among students who were NPSAS:08 study respondents, were potentially eligible based on the enrollment list but not based on NSC or CADE, and were confirmed eligible by the transcript. The third highest sampling rates were among students who were NPSAS:08 study respondents, were potentially eligible based on NSC, CADE, or the enrollment list, but had no transcript, and among students who were not NPSAS:08 study respondents, were potentially eligible based on NSC, CADE, or the enrollment list, and were confirmed eligible by the transcript. The lowest sampling rates were among students who were not NPSAS:08 study respondents, were potentially eligible based on NSC, CADE, or the enrollment list, but had no transcript.⁶ Table 6 shows the distribution of the potential baccalaureate recipients without a NPSAS:08 interview and the subsample. These distributions are based on whether or not

⁶ The number of students who were not NPSAS:08 study respondents, were potentially eligible based on NSC, CADE, or the enrollment list, but had no transcript, was small, so these students were combined into one stratum for sampling purposes.

they were a NPSAS:08 study respondent, were confirmed eligible by the transcript or did not have a transcript, and were confirmed in NSC or CADE as being eligible. Table 7 shows the distribution of the full sample by institution control.

Table 6. Eligible sample and subsample sizes of the NPSAS:08 potential bachelor's degree recipients without a NPSAS:08 interview

NPSAS:08 study respondent	Source of potential eligibility			Potential bachelor's degree recipients		
	Transcript	NSC	CADE ¹	Number eligible	Sample size	Percent of eligible ²
Total	†	†	†	5,150	500	9.7
Yes	Yes	Yes	Yes	1,570	180	11.3
Yes	Yes	Yes	No	350	40	11.3
Yes	Yes	No	Yes	1,510	170	11.3
Yes	Yes	No	No	500	50	9.9
Yes	No	Yes	Yes	120	10	5.1
Yes	No	Yes	No	60	#	5.4
Yes	No	No	Yes	370	20	5.1
Yes	No	No	No	250	10	5.1
No	Yes	Yes	Yes	60	#	5.5
No	Yes	Yes	No	80	#	5.1
No	Yes	No	Yes	80	#	5.3
No	Yes	No	No	120	10	5.2
No	No	Yes	Yes	10	#	#
No	No	Yes	No	20	#	#
No	No	No	Yes	20	#	#
No	No	No	No	50	#	#

Rounds to zero.

† Not applicable.

¹ Students without a NPSAS:08 interview who were not identified as a potential baccalaureate recipient from CADE were identified from the enrollment list.

NOTE: Detail may not sum to totals because of rounding. NPSAS = National Postsecondary Student Aid Study.

NSC = National Student Clearinghouse. CADE = computer-assisted data entry.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2007–08 National Postsecondary Student Aid Study (NPSAS:08) and 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table 7. Sampled students, by institution control: 2009

Institution control ¹	Sampled students	
	Number	Percent
All students	18,500	100.0
Public	10,810	58.4
Private nonprofit	6,750	36.5
Private for-profit	940	5.1

¹ Institution control is based on data from the sampling frame formed from IPEDS:2004–05 and freshened from IPEDS:2005–06.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

2.4 B&B:08 Cohort

There were 25,050 NPSAS:08 sample members who were potentially eligible for membership in the B&B:08 cohort according to their NPSAS:08 interview, CADE, and/or enrollment list status. Between the NPSAS:08 data collection and the start of the B&B:08/09 data collection, sample members whose transcripts, NPSAS:08 student interview, or administrative data showed they were ineligible, as well as deceased sample members, were removed from the B&B:08 cohort. At the beginning of the B&B:08/09 data collection 18,500 individuals were included in the B&B:08/09 sample. Prior to the start of B&B:08/09 data collection, 1,320 individuals were found to be ineligible leaving 17,170 eligible individuals in the sample.

At the end of the B&B:08/09 data collection 17,160 eligible sample members remained in the B&B:08 cohort (deceased cases were removed). Of the 17,160 eligible sample members 15,050 were considered B&B:08/09 student interview respondents, 16,070 were considered transcript respondents, and 14,010 were considered combined interview and transcript respondents.⁷

A B&B:08/09 student interview respondent was defined as any sample member who was determined to be eligible for the study, was not deceased at the time of the B&B:08/09 data collection, and had a completed, partial, or abbreviated interview. A student transcript respondent was defined as any sample member who was determined to be eligible for the study, was not deceased at the time of the B&B:08/09 data collection, and had a transcript provided by the NPSAS:08 institution. A combined student interview and transcript respondent was both an interview and a transcript respondent.

⁷ The 15,050 interview respondents exclude 40 cases on which data collection analyses are based in Chapter 3. These 40 cases were sampled as NPSAS interview respondents but they did not have enough data to be NPSAS study respondents.

Chapter 3.

Student Interview Design, Data Collection, Outcomes, and Evaluation

The B&B:08/09 student interview was designed for web, telephone, and field administration and included an abbreviated Spanish interview. Sample members were primarily located using batch address and phone sources and were asked to complete the student interview between July 2009 and March 2010. Analyses and evaluation of data collection from a student interview field test as well as from this full-scale study provided information for consideration when planning future administrations of B&B.

3.1 Student Interview Design and Systems

The B&B:08/09 student interview consisted of seven sections, grouped by topic. B&B:08/09 abbreviated interviews were also offered in English and Spanish; these abbreviated interviews consisted of selected questions from all sections. This section provides the details of the student interview design and systems.

3.1.1 Student Interview Design

The content of the interview was based on previous B&B student interviews created for the B&B:93 and B&B:2000 cohorts, and on a B&B:08/09 student interview field test, building on data elements developed with input from the study's Technical Review Panel (TRP) and from NCES. For a list of TRP members, see appendix B; for a list of the final set of student interview data elements, see appendix C.

The interview consisted of seven sections, grouped by topic. Respondents were guided through each section of the interview according to skip logic that took into account previously provided information from the NPSAS:08 and information recorded as the respondent progressed through the B&B:08/09 interview. Following are descriptions of the seven interview sections.

1. *Eligibility* determined eligibility for the survey based on date of completion of bachelor's degree requirements at the NPSAS institution. In order to continue with the survey, respondents had to indicate that they completed bachelor's degree requirements between July 1, 2007, and June 30, 2008, and that they had been awarded the bachelor's degree from the NPSAS institution by June 30, 2009.
2. *Undergraduate Education* gathered enrollment information on all postsecondary institutions attended prior to receiving the bachelor's degree from the NPSAS institution. This section also captured NPSAS institution major or field of study, enrollment intensity, and academic experiences such as course withdrawals or academic honors. The section concluded with questions about undergraduate financial aid received by respondents and satisfaction with undergraduate education and choice of major.
3. *Postbaccalaureate Education/Training* collected information about the respondent's postbaccalaureate schools including any undergraduate or graduate degrees or certificates received after the NPSAS bachelor's degree, related majors or fields of study, enrollment

- intensity, reasons for attendance, and financial aid received. The section concluded with questions about nondegree coursework and future education plans.
4. *Postbaccalaureate Employment* captured the respondent’s current employment status and job characteristics such as job title and duties, earnings, average hours worked per week, benefits, employer industry, and employer’s ZIP code. This section also captured information about the relationship of the job to the bachelor’s degree field, number of jobs held since graduation, and periods of unemployment.
 5. *Kindergarten–12th Grade (K–12) Teaching* collected K–12 teaching preparation and interest and teacher and content area certifications. This section also collected teaching positions since graduation with the bachelor’s degree, names of K–12 schools where the respondent taught, grade levels and subjects taught, experiences in the first teaching job such as participation in a teacher internship or mentor program, satisfaction with teaching and plans for staying in teaching, and awareness of the Teacher Education Assistance for College and Higher Education (TEACH) Grant and teacher loan forgiveness programs.
 6. *Student Background* obtained information about student demographic characteristics, including citizenship, military status, foreign language proficiency, marital status and household composition, annual income and monthly expenses, voting behavior, volunteerism, and disability status.
 7. *Locating* captured contact information for the second follow-up study.

The interview sections and principal topics in each section are summarized in figure 2. For the complete B&B:08/09 full-scale instrument facsimile, see appendix D.

Figure 2. Interview sections and topics: 2009

<p>Section 1. Eligibility Confirmed eligibility for interview</p>	<p>Section 5. Kindergarten–12th-Grade Teaching Teaching preparation and interest Teacher certifications Teaching positions and school names Grade levels and subjects taught Teaching experiences and satisfaction Plans for staying in teaching</p>
<p>Section 2. Undergraduate Education Undergraduate schools and degrees NPSAS school major, enrollment intensity, academic experiences Financial aid Satisfaction with undergraduate education</p>	<p>Section 6. Student Background Citizenship and voting Foreign language proficiency Marital status and household composition Annual income and monthly expenses Civic participation</p>
<p>Section 3. Postbaccalaureate Education/ Training Postbaccalaureate schools and dates Majors or fields of study Financial aid Future education plans</p>	<p>Section 7. Locating Contact information for follow-up study</p>
<p>Section 4. Postbaccalaureate Employment Employment status Occupation title and duties Salary and benefits Employer industry Periods of unemployment</p>	

NOTES: NPSAS = National Postsecondary Student Aid Study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

A single instrument was developed to be administered in one of three modes: web, telephone, or field. For telephone and field interviews, the interviewer accessed the web instrument through RTT's case management system.

To minimize mode effects, specific methodological features were incorporated into the instrument to provide web respondents with the assistance normally provided by a trained interviewer:

- help text on every form to define key terms and clarify question intent;
- pop-up messages to correct responses that were out of range or in an incorrect format;
- conversion text to encourage responses to critical items when these items were left unanswered; and
- pop-up messages prompting sample members to provide a response when they left three consecutive questions blank.

Additionally, instructions indicating how each question was to be administered (e.g., whether the response options were to be read aloud, when to probe) were included for telephone and field interviewers on each screen to minimize differences between interviews administered by an interviewer and web interviews.

Coding systems. Assisted coding systems were used in the interview to standardize the collection and coding of the respondent's postsecondary schools attended, major or field of study, occupation, and any elementary or secondary schools where the respondent may have taught. The name or title of each of these items was entered as a text string in each coder and a keyword search conducted on an underlying database returned a list of possible matches. An assisted coding system was not used to code industries, but available industry classifications allowed respondents and interviewers to select an industry classification from among a list of standardized options. Following are descriptions of the individual coding systems and sources:

- The *postsecondary school coder* was developed from the set of institutions contained in the Integrated Postsecondary Education Data System (IPEDS), developed by NCES (<http://nces.ed.gov/ipeds/>). For any schools not listed in the database, respondents were asked to provide the control (e.g., public or private) and level (e.g., 4-year or 2-year) of the school.
- The *major coder* was constructed using the 2010 Classification of Instructional Programs (CIP) taxonomy, also developed by NCES (<http://nces.ed.gov/ipeds/cip2010>). For any majors or fields of study not listed in the database, respondents were asked to provide a general major area and a specific discipline.
- The *occupation coder* was built from the Occupational Information Network Online (O*NET OnLine) database (<http://online.onetcenter.org>). For any occupations not listed in the database, respondents were asked to provide a general area, a specific area, and finally a detailed classification area for the occupation.
- The *industry coder* was based on the North American Industry Classification System (<http://www.census.gov/epcd/www/naics.html>). A text string was collected from the respondent, and then the respondent was asked to choose the category that best described his or her employer's industry. Industry choices were laid out in general categories across the screen. When the respondent selected a category, examples of

businesses within that industry were displayed, allowing the respondent to determine the appropriateness of the industry chosen.

- The *elementary and secondary school coder* (“El/Sec coder”) was used to code any elementary or secondary schools where respondents had taught. The NCES data sources used for schools in the El/Sec coder were the Private School Universe Survey for private schools (<http://nces.ed.gov/surveys/pss/>) and the Common Core of Data for public schools (<http://nces.ed.gov/ccd/>). On the two forms prior to the El/Sec coder, the respondent indicated whether the school was public or private, and then provided the city and state of the school. For schools not identified within the El/Sec coder, the entered text string was retained, and respondents were asked to supply the school type (public, private, etc.); the names of the school’s district, county, or both; and the lowest and highest grade levels that were taught at the school.

Spanish interview. A Spanish abbreviated interview was developed for primarily Spanish-speaking sample members. The Spanish abbreviated interview comprised the same questions as the English abbreviated interview, which included selected questions from all sections. The Spanish interview was made available to respondents in web mode. This mode of administration required the translation into Spanish of not only question wording and response options, but also of all the specific methodological features incorporated into the instrument to provide web respondents with the assistance normally provided by a trained bilingual interviewer (i.e., help text, pop-up messages to correct responses that were out of range or in an incorrect format, conversion text, and general error messages). The two coders in the Spanish abbreviated instrument, the major coder and the occupation coder, were not translated; however, instructions were provided in Spanish to both respondents and bilingual interviewers explaining that they should choose a major or occupation code in English, if possible, or instead enter a text string in Spanish and not attempt the coding of the major or occupation.

3.1.2 Data Collection Systems

This section describes the data collection systems used for the B&B:08/09 data collection, including the Hatteras Survey Engine and Survey Editor (RTI’s proprietary web-based interviewing software), the Instrument Development and Documentation System (IDADS), and the Integrated Management System (IMS).

Hatteras Survey Engine and Survey Editor. The B&B:08/09 survey instrument was created with Hatteras, a web-based system in which project staff developed, reviewed, tested, modified, and communicated changes to specifications and code for the instrument. All information relating to the instrument was stored in an SQL Server database and was made accessible through web browser interfaces. Hatteras provided specification, programming, and testing interfaces for the B&B instrument as follows.

- *Specifications.* Hatteras provided the tools and user interface for developing interview specifications. Specification content included wording at the form, question, item, and response option levels; help text content; item-level data documentation; and form-level question administration documentation. Specific capabilities of the Hatteras system allowed instrument designers to import any relevant specifications used in prior studies, create skip logic and item documentation, and search a library of survey items. Instrument designers were also able to take advantage of a comprehensive comment

tracking system to communicate and test necessary instrument changes with programmers.

A web interface provided access for project staff at MPR and at NCES to test and comment on the instrument throughout development.

- *Programming code.* For simple instrument questions and items, Hatteras automatically translated specifications into web page scripts when the web page was accessed. For questions involving complex routing, multiple question wording or response option conditions, or nonstandard page layout or behavior, programmers entered custom programming code—HTML, JavaScript, and C#.NET script—into the Hatteras custom code interface. This code was stored in the SQL Server database, together with the instrument specifications for compilation by the survey execution engine.
- *Instrument testing and execution.* The Hatteras system’s survey execution engine allowed immediate testing of specification and code content on a test link. The execution engine also automatically handled such web instrument functions as backing up and moving forward, recording instrument timing data, displaying critical-item wording, validating user input, displaying conditional instructions based on interview mode (web, telephone, or field) and linking to context-specific help text.
- *Survey sites and data transfer—web/telephone.* For web and telephone data collection, the Hatteras survey execution system was installed on NCES surveys web server farm and SQL Server database. Web respondents accessed the survey directly by web browser after logging in with a user ID and password. RTI’s telephone interviewers accessed the same NCES web survey site by means of a web browser process launched from an RTI Case Management System (CATI-CMS).⁸ All connections to the NCES web interview were secured with Secure Sockets Layer (SSL) encryption. Automated processes transferred data between RTI’s local database and the NCES database via a secure, encrypted connection.
- *Survey sites and data transfer—field.* For field interviews, the Hatteras survey execution system was installed on local web and database servers on laptop computers. Field interviewers accessed the laptop-based survey by logging in through three independent levels of security, including a whole-disk encryption outer level. Interview control and response data were transferred between RTI and field laptops via secure, encrypted automated connections.

IDADS. The web-based IDADS documentation module contained the finalized version of all instrument items, their screen wording, and variable and value labels. Also included were the more technical descriptions of items such as variable types (alpha or numeric), to whom the item was administered, and frequency distributions for response categories based on completed interview data. The documentation module was used to generate the instrument facsimiles and the deliverable ECB input files.

IMS. All aspects of the study were controlled using an IMS, a comprehensive set of desktop tools designed to give project staff and NCES access to a centralized, easily accessible repository for

⁸ The Computer-Assisted Telephone Interviewing Case Management System (CATI-CMS) is the system that assigns cases to be called and provides telephone interviewers with the appropriate screens and scripts to be used during the contacting and locating phase of CATI.

project data and documents. The B&B:08/09 IMS consisted of several components: the management module, the Receipt Control System (RCS) module, and the instrumentation module.

- *Management module.* The management module of the IMS included tools and information to assist project staff and the NCES project officer in managing data collection. All management information pertinent to the study was located there, accessible via the Web, and protected by SSL encryption and a password-protected login. The IMS contained the current project schedule, monthly progress reports, daily data collection reports and status reports (generated by the RCS described below), project plans and specifications, project deliverables, instrument specifications, a link to the Hatteras system, staff contacts, the project bibliography, and a document archive.
- *RCS.* The RCS is an integrated set of systems that was used to control and monitor all activities related to data collection, including tracing and locating. Through the RCS, project staff were able to perform tracing and data management operations, track case statuses, identify problems early, and implement solutions effectively. The RCS's locator data were used for a number of daily tasks related to sample maintenance. Specifically, mailout systems produced paper mailings and e-mailings to sample members, the query system enabled administrators to review the locator information and status for a particular case, and the mail return system enabled project staff to update the locator database as mailings or address update sheets were returned or forwarding information was received. The RCS also interacted with the computer-assisted telephone interviewing (CATI) system, sending locator data between the two systems as necessary.
- *Instrumentation module.* The instrumentation module managed development of the multimode web data collection instrument within Hatteras. Developing the instrument with Hatteras ensured that all variables were linked to their item and screen wordings and were thoroughly documented.

3.2 Student Interview Data Collection

The B&B:08/09 interview data collection involved training data collection staff and locating, contacting, and interviewing sample members. Each of these procedures is detailed in this section.

3.2.1 Training of Interview Data Collection Staff

Members of the data collection staff included quality control supervisors (QCS), help desk agents (HDAs), telephone interviewers, field interviewers, and intensive-tracing staff. Prior to beginning work on B&B, all data collection staff completed a comprehensive training program. Topics covered in training programs included a review of confidentiality requirements, an overview of B&B:08/09, frequently asked questions, and administrative procedures for case management as well as hands-on practice. All training programs were designed to maximize active participation of the trainees. The training schedule and number of data collection staff trained are presented in table 8. The specific roles and duties of data collection staff are summarized in the following subsections, along with a description of the training program (see appendix E for training materials).

Table 8. B&B:08/09 training of data collection staff: 2009

Staff trained	Time period	Number of staff trained
Quality control supervisors	July 1, 2009	15
Help desk agents	July 6–7, 2009	9
Telephone interviewers	August 10–12 and September 8–10, 2009	24
Intensive-tracing staff	September 10 and January 8, 2009	14
Field staff	December 1–2, 2009	18

NOTE: B&B = Baccalaureate and Beyond Longitudinal Study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

QCS provided support and guidance for the telephone interviewers, monitored interviewer production, and helped troubleshoot problems. They attended B&B project supervisor training and also participated in telephone interviewer project training. Training included an overview of B&B:08/09, conversational interviewing techniques expected of interviewing staff, problem resolution, case review, an explanation of project-specific reports, and other specific project procedures and protocols. The quality control supervisors were also provided with a supervisor manual to be used as a reference throughout the course of data collection.

HDAs. A staff of help desk agents assisted sample members who had questions or problems while completing web interviews. Help desk agents were certified telephone interviewers specially trained to unlock cases, reissue passwords, record and track calls to the study help line via the help desk application, and effectively respond to callers' questions. During the early response period, help desk agents also made prompting calls to NPSAS:08 interview nonrespondents and completed telephone interviews with sample members who preferred a telephone to a web interview. Help desk training materials included a project telephone interviewer manual with a help desk supplement and various project handouts.

Telephone interviewers. Telephone interviewers were responsible for gaining cooperation from and conducting interviews with sample members, averting and converting interview refusals, and addressing the concerns of reluctant sample members. Telephone interviewers received 12 hours of training that included an overview of the study, an in-depth review of the interview instrument, hands-on practice administering the telephone interview, review of appropriate conversational interviewing techniques, and practice with the CATI-CMS. At the conclusion of training, all telephone interviewers were certified by successfully conducting mock telephone interviews and by providing satisfactory responses to the study's frequently asked questions. Telephone interviewer training materials included a telephone interview manual and multiple project handouts.

Field interviewers. Field interviewers conducted interviews, either in person or by telephone, with sample members residing in 17 selected geographic clusters in the U.S. and Puerto Rico. Field interviewers were required to attend a 4 hour training session held via teleconference.⁹ Each field interviewer was required to complete a home study exercise prior to the teleconference training. Field interviewers, all of whom had recently completed an in-depth classroom training on field data collection techniques for their work on BPS:04/09, received additional training on the field case management system, coding, management of the case assignment folders, and proper care

⁹ All field interviewers trained to work on B&B:08/09 had recently completed work on BPS:04/09, a study with similar procedures; therefore, the B&B:08/09 training included only content specific to this study.

and use of the B&B laptops. Field interviewers were also required to conduct successful certification mock interviews and multiple other certification exercises with their field supervisor over the phone before they were permitted to begin work. Field interviewer training materials included a field interviewer manual and additional handouts and forms used to document all field procedures and expectations of work.

Tracing staff. Tracing staff (tracers) used intensive measures (described in section 3.2.3) to locate sample members designated as lacking good telephone contacting information. Tracers attended a comprehensive 16-hour training session that was led by RTI tracing managers within RTI's Call Center Services (CCS) and covered all tracing procedures. Tracers also received 2 hours of project-specific training. They received an overview of B&B, a review of the FAQs, background information on the B&B sample, and the tracing techniques best suited to locating B&B sample members.

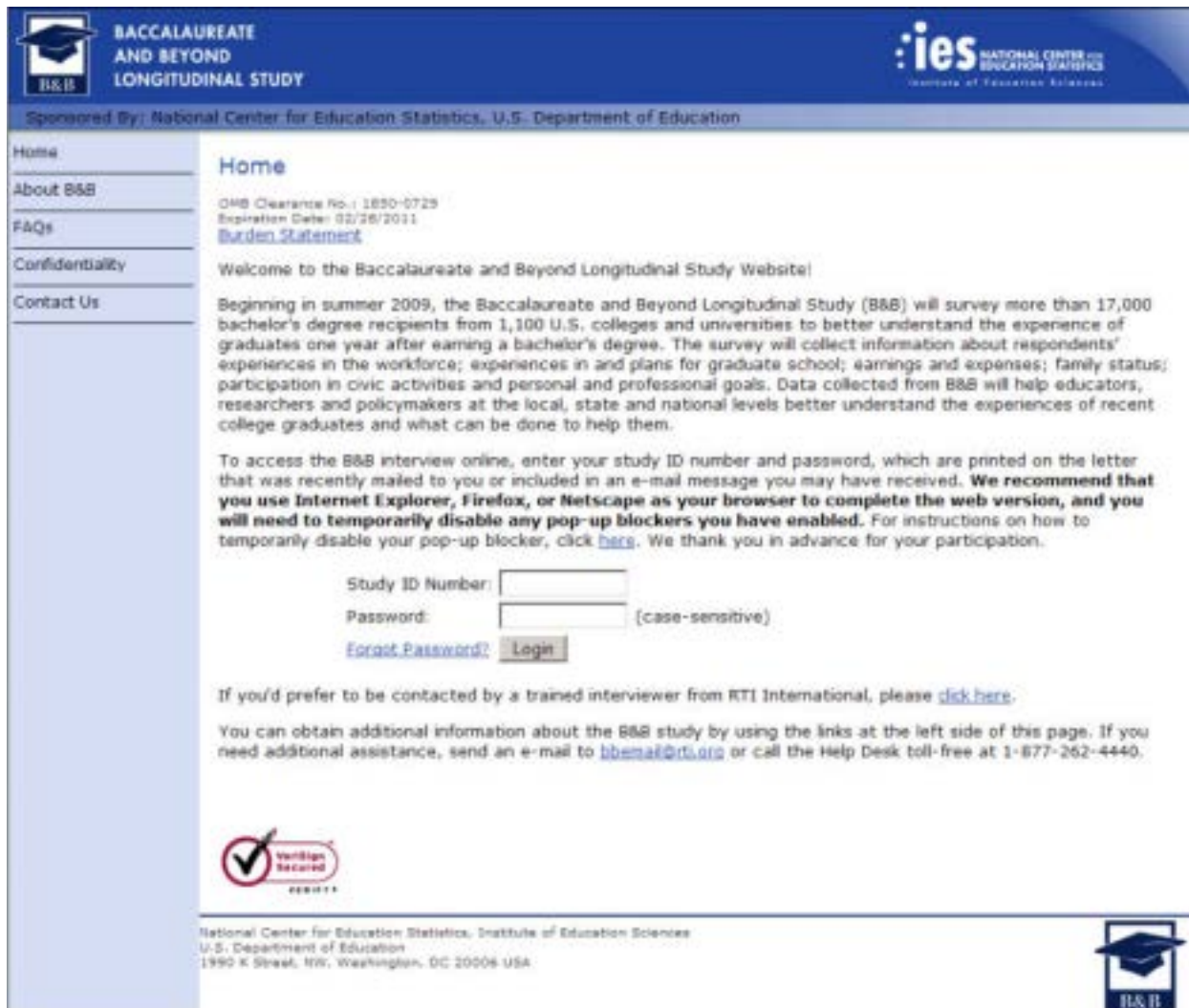
Additional trainings. Selected staff received additional training modules, such as refusal-conversion training, and Spanish interview training (for certified bilingual staff). Additionally, quality circle meetings were routinely conducted as an extension of the training program for continual quality improvement. Data collection staff were given the opportunity to ask questions in meetings and as needs were identified, additional training topics were highlighted and addressed in subsequent meetings. After each meeting, quality circle notes were posted on the call center's project website and on the project IMS.

3.2.2 Study Website

B&B:08/09 sample members were provided a link to the B&B website prior to the start of data collection. The website provided general information about the B&B set of studies, including details about the study sponsor and contractors, how the data are used, answers to frequently asked questions, confidentiality assurances, and selected findings from earlier studies. The website also provided contact information for the study help desk and project staff at RTI, as well as links to the main NCES and RTI websites. Sample members were able to log in to the secure portion of the website to provide updated contact information and complete the student interview once it became available.

Designed according to NCES web policies, the B&B:08/09 website used a three-tier security approach to protect all data collected. The first tier of security included secure log-ins, with a unique study ID and strong password provided to sample members prior to the start of data collection. The second tier of security protected any data entered on the website with SSL technology, allowing only encrypted data to be transmitted over the Internet. The third tier of security stored any collected data in a secured SQL Server database located on a server machine that was physically separate from the Web server. Figure 3 shows the home page for the B&B:08/09 website.

Figure 3. B&B:08/09 website home page: 2009

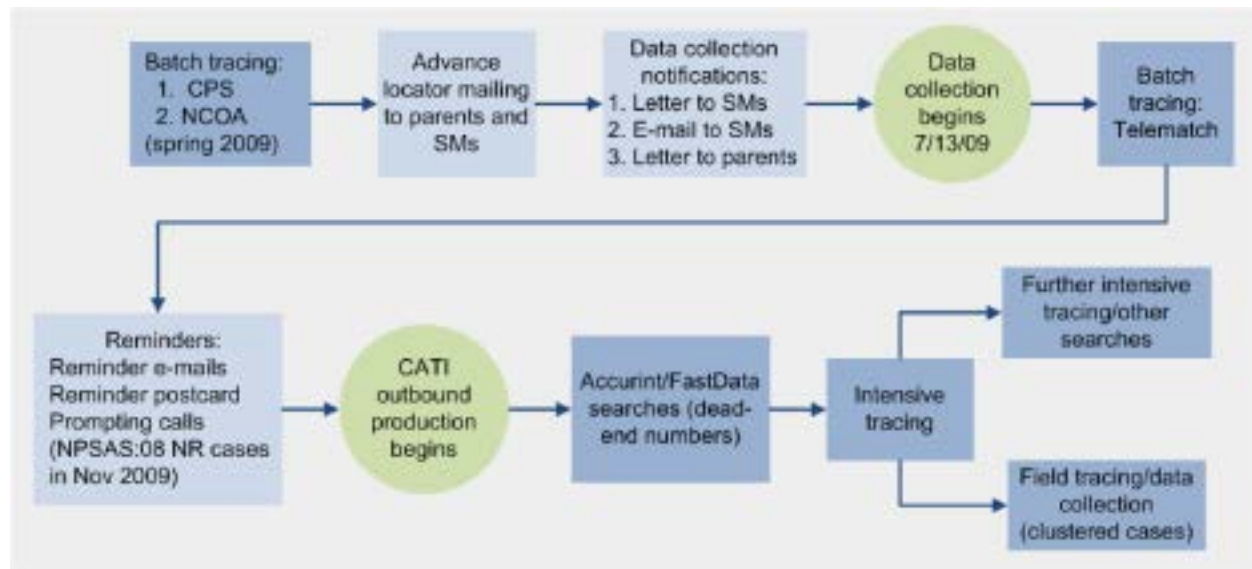


SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

3.2.3 Locating and Contacting Sample Members

Several locating methods were used to find and collect up-to-date contact information for the B&B:08/09 sample (figure 4). Batch searches of national databases and prenotification address update mailings were conducted prior to the start of data collection. After the start of data collection and for those sample members not yet found, follow-up locating methods were employed, including CATI locating, intensive tracing, and field tracing.

Figure 4. Locating methods: 2009



NOTE: NCOA = National Change of Address. CPS = Central Processing System. SM = sample member. NPSAS = National Postsecondary Student Aid Study. NR = nonresponse. CATI = computer-assisted telephone interviewing.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Batch tracing. Before mailing activities began, batch database searches were conducted to update sample member contact information. These searches used the CPS and the U.S. Postal Service (USPS) National Change of Address databases. The information obtained from these sources was compared with the information previously available from the NPSAS:08 locator database to identify any new contact information. Then, just prior to the start of outbound telephone interviewing, all sample member addresses and telephone numbers were sent to Telematch, a computerized residential telephone number service with the not-yet-published numbers of new movers, to obtain any telephone number updates.

Mailings. In May 2009, about 7 weeks before the start of B&B:08/09 data collection, a mailing was sent to the parents of base-year respondent sample members younger than 26 years old, to gain their assistance with providing up-to-date contact information for these sample members. This mailing included a study brochure, a letter with detailed information about B&B:08/09 signed by the associate commissioner of NCEES, an address update sheet, and a business reply envelope. (Parents of base-year nonrespondent sample members younger than 26 years old received their version of the letter in October 2009.)

The final step in the predata collection locating and contacting effort occurred in June 2009, approximately 4 weeks before the start of data collection, with a similar address update mailing going to sample members (using any updated contact information provided by parents, if applicable). The mailing contained a letter notifying sample members of the upcoming B&B:08/09 data collection, the study brochure, an address update sheet, and a business reply envelope. Sample members were asked to update their address information on the address update sheet and return it in the postage-paid envelope. They also had the option of entering the information using the online form available on the B&B study website. The address update sheet and online form included a space prompting sample members to indicate a preference for being notified by text message of the start of data collection.

B&B data collection started on July 13, 2009, with the mailing of a data collection announcement to base-year respondents by USPS first-class mail in a 9 x 12 inch B&B envelope. Base-year nonrespondents received their mailing in November, also by USPS first-class mail in a 9 x 12 inch B&B envelope. The mailing to all sample members included a study brochure and a letter that announced the start of data collection. The letter, signed by both the B&B project director and the NCES project officer, included a \$5 bill and informed sample members of the additional cash incentive for completing the interview by the early incentive deadline specified in the letter, provided the study website and sample member's user ID and password for accessing the web interview, and provided the study's toll-free help desk number and e-mail address. The same day, an e-mail containing information comparable to that in the data collection announcement letter was sent to sample members.

As soon as a parent address was available, a letter was also mailed to parents of all base-year respondent sample members younger than 26 years old explaining the importance of the study and asking parents to encourage sample members to participate. The letter was sent to parents of all base-year nonrespondent sample members younger than 26 years old in October 2009.

Additional mailings included a postcard reminder sent about 10 days after the data collection announcement and two additional e-mail reminders to encourage early interview response. Once outbound telephone interview efforts began and throughout data collection, periodic mailings and e-mails went to interview nonrespondents throughout the course of data collection (for student interview data collection notification materials, see appendix F).

CATI locating and preintensive tracing. Telephone interviewers made prompting calls to base-year nonrespondents during the early response period of data collection. These calls, described in more detail in section 3.4.1, helped identify cases that required further tracing in addition to encouraging early response. Once outbound telephone interviewing began, telephone interviewers conducted limited tracing and locating activities as needed. The telephone number believed to be the best known number for contacting the sample member was attempted first. If the sample member could not be reached at that number after several attempts, any other numbers associated with the sample member, including parent and other contacts, were called. If the sample member could not be located, the case was designated for FastData and Accurint batch services which provided an automated search for matching phone numbers to sample members using combinations of address, name, and Social Security number (SSN). Cases for which neither FastData nor Accurint Batch generated new telephone numbers were sent for intensive interactive tracing by RTT's Tracing Operations (TOPS).

Overall, for B&B:08/09 data collection, the batch matching successfully confirmed contact information or provided new contact information for 20,070 records. The most records, 8,300, were matched through Telematch. While the fewest records, 570, were matched through FastData, this data source combined with Accurint minimized the number of cases requiring more costly intensive tracing. Table 9 shows the match rates for each tracing source.

Table 9. Batch processing record match rates, by tracing source: 2009

Tracing source	Number of records sent	Number of records matched	Percent matched
Total	48,130	20,070	41.7
CPS	16,640	5,080	30.5
NCOA	17,150	4,680	27.3
Telematch	11,270	8,300	73.6
FastData	1,570	570	36.3
Accurint	1,500	1,440	95.7

NOTE: Detail may not sum to totals because of rounding. CPS = Central Processing System. NCOA = National Change of Address.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Intensive tracing. The most difficult locating cases were traced at TOPS using a two-tiered strategy and a number of sources. TOPS-1, the first tier, identified sample members with SSNs available to trace through consumer databases (FastData's SSN search and Experian) that contain current address and telephone listings of consumers with credit histories. If a search generated a new telephone number for the sample member, tracers attempted to confirm the information by speaking with the sample member or with someone else who could verify the information. If the telephone number was confirmed, the case was sent back to CATI for telephone interviewing. This first level of effort minimized the time that cases were in tracing and unavailable for CATI efforts. Cases still not located and that were not in a field cluster underwent a more intensive level of tracing in TOPS-2. TOPS-2 included calls to other possible sources of information, including, for example, directory assistance, alumni offices, and contacts with neighbors or landlords. Whenever any of these sources provided information that indicated a sample member was not available for the study (e.g., deceased, incarcerated, or out of the country), no further contact efforts were made.

Overall, about 7 percent of eligible sample members required intensive tracing (table 10). Thirty-three percent of the NPSAS:08 interview nonrespondents required intensive tracing, compared with 6 percent of NPSAS:08 interview respondents ($\chi^2 = 12.15, p < .001$). Nine percent of sample members at private, for-profit, 2-year-or-more NPSAS institutions required intensive tracing, compared with 6 percent of sample members whose NPSAS institutions were private, nonprofit 4-year doctorate-granting schools ($\chi^2 = 3.02, p < .001$).

Table 10. Cases requiring intensive tracing, by base-year response status and institution type: 2009

Base-year response status and institution type	Total	Cases requiring intensive tracing	
		Number	Percent
Total	17,170	1,210	7.1
Base-year response status			
NPSAS:08 respondent	16,720	1,060	6.3
NPSAS:08 nonrespondent	460	150	33.3
Institution type			
Public			
2-year	#	#	#
4-year non-doctorate-granting	2,590	200	7.7
4-year doctorate-granting	7,320	520	7.1
Private nonprofit			
4-year non-doctorate-granting	3,170	210	6.7
4-year doctorate-granting	3,200	200	6.3
Private for-profit			
2-year-or-more	900	80	9.2

Rounds to zero.

NOTE: Detail may not sum to totals because of rounding. NPSAS = National Postsecondary Student Aid Study.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Field tracing. Any cases not located after TOPS-1 intensive tracing and thought to be in one of the 17 selected geographical field clusters were designated for field tracing instead of TOPS-2. Information provided to field interviewers included all address and telephone information available for an assigned case, the results of TOPS-1 intensive tracing efforts, and the details of all call attempts made by telephone interviewers. In addition to these tracing resources, field interviewers had access to contacts within the community, such as post office mail carriers or local public records that could provide additional information. Many field interviewers also had the added advantage of calling from telephones with local area codes familiar to sample members, increasing the likelihood that sample members would respond to the telephone calls.

3.2.4 Interviewing

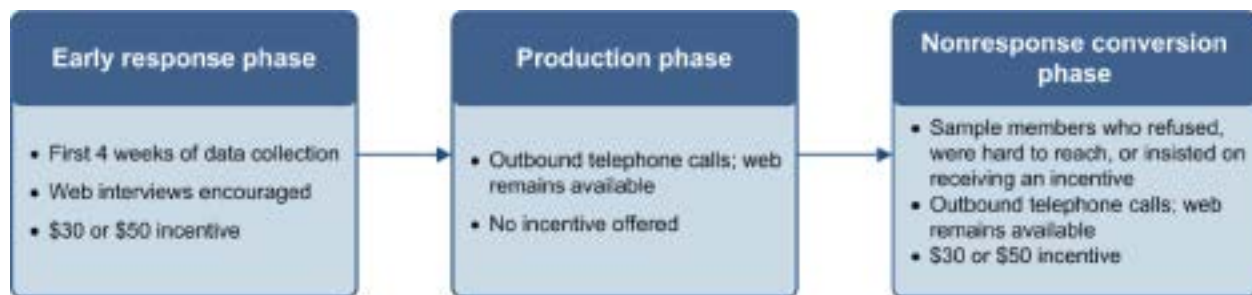
Data collection for the B&B:08/09 interview consisted of three phases (figure 5):

1. *Early response phase.* This phase began with the start of data collection in July 2009 for base-year respondents and lasted approximately 4 weeks. Data collection began in waves, based on the early incentive expiration date assigned to each case. The early response phase for base-year nonrespondents began in November 2009. Base-year respondents who completed the interview during their early response phase received an incentive of \$30; base-year nonrespondents received a \$50 incentive.¹⁰

¹⁰ Base-year nonrespondents received telephone prompting calls during the early response phase to remind them of their inclusion in the study and to encourage their participation.

2. *Production phase.* During this phase, which only applied to base-year respondents, interviewers called to encourage sample members to complete the interview by telephone or on the Web. No incentive was offered during this phase.
3. *Nonresponse conversion phase.* Cases in this phase belonged to one of the following groups: interview refusal by the sample member or a sample member contact, *hard-to-reach*,¹¹ not locatable after intensive tracing, *insist-pay*,¹² base-year nonrespondents who did not complete during the early response phase, and field cases that did not fit into one of the preceding groups. Base-year respondents who completed the interview during the nonresponse conversion phase were offered a \$30 incentive and base-year nonrespondents were offered a \$50 incentive. Data collection ended in March 2010.

Figure 5. Data collection phases: 2009



SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Sample members could complete the interview on the Web or by telephone throughout the data collection period. The interview screens in the telephone and field interviews were identical to those in the web interviews, except that interviewer instructions on how to administer each question were visible at the top of each screen for telephone and field interviews. Following are details of the administration of the interview through the various modes.

Web interviews. Sample members were informed of the web interview in the data collection announcement mailing. During the early response period (the first 4 weeks of data collection), only web interviews were completed unless sample members initiated a telephone interview by calling the help desk or sending an e-mail asking to be called. Reminder mailings and e-mails were sent throughout the production and nonresponse conversion phases of data collection to encourage sample members to complete the interview online. The website was accessible 24 hours a day, 7 days a week, throughout the data collection period, providing sample members with the option to complete the interview online at any time.

Help desk operations. The help desk for B&B:08/09 opened on July 14, 2009, in anticipation of the first respondent calls after the data collection announcement mailing. Help desk staff were available to assist sample members who had questions or problems accessing and completing the web interview. A toll-free help line was established to accept incoming help desk calls. If technical difficulties prevented sample members from completing the web interview, help desk agents—also trained to conduct telephone interviews—encouraged sample members to complete a telephone interview.

¹¹ *Hard-to-reach* cases were those that were called at least 15 times (8 times for base-year nonrespondents) and yielded minimal or no contact with the sample member.

¹² *Insist-pay* cases were those in which sample members completed the interview during the production phase but insisted on receiving the incentive amount offered during the early response phase.

A help desk application was created to document incoming calls from sample members and other contacts. Specifically, the help desk application included the following:

- information needed to verify the sample member's identity;
- login information needed by the sample member to access the web interview;
- a means to update sample member contact information, as needed;
- functionality to unlock cases and send an e-mail containing the website and study login information to the sample member;
- systematic documentation of each call;
- a means for tracking calls that could not be resolved immediately; and
- a record of the CATI-CMS events, which also included prior help desk events.

The help desk application provided project staff with the resolution status of all help desk events and reports on the type and frequency of problems experienced by sample members.

Telephone interviews. Telephone follow-up locating and interviewing began on August 13, 2009, after the 4-week early response period ended for the group of cases with the first early response incentive expiration date. Telephone interviewing procedures included attempts to locate, gain cooperation from, and interview sample members who had not yet completed the interview. Interviewers encouraged sample members to complete the interview by telephone; however, sample members could still complete the interview on the Web, if that was their preference. Sample members who did express a preference to complete a web interview were called back 5 days later for follow-up if the interview had not yet been completed.

The CATI-CMS included an automated call scheduler that assigned cases to interviewers by case priority, time of day, day of week, existence of previously scheduled appointments, and type of case. Case assignment was designed to maximize the likelihood of contacting and interviewing sample members and cases were assigned to various queues accordingly. For example, the CMS included queues for new cases that had not been called, Spanish-language cases, initial refusals,¹³ and various appointment queues. In addition, available telephone numbers for each case were automatically prioritized for the interviewers. As new roster lines¹⁴ were added—as a result of CATI tracing, other tracing efforts, and information from other sources such as respondent e-mails or help desk call-ins—available telephone numbers were re-prioritized based on the new information.

Some cases required special treatment. For cases with sample members or contacts who spoke only Spanish, bilingual interviewers were available to administer a Spanish interview (see section 3.1.1 for details regarding the Spanish interview). To gain cooperation from those sample members who initially refused to participate (including contacts who acted as *gatekeepers* to the sample member), interviewers were trained in refusal-conversion techniques. As the end of data collection approached, all telephone interviewers were trained to administer the abbreviated English-language interview to reluctant sample members.

Field interviews. Field data collection activities began approximately 5 months after the start of outbound telephone interviewing, during the nonresponse conversion phase of data

¹³ An initial refusal was an interviewer's first indication that the sample member did not wish to participate in an interview. Interviewers typically followed-up on initial refusals in attempts to convert sample members into interview respondents.

¹⁴A roster line represented a unique telephone number to call in CATI.

collection. Using the last known address for each case, RTP's Geographic Information System program conducted an analysis of the B&B:08/09 sample to identify the 17 geographic areas with the highest density of sample members residing within a 100-mile radius of the cluster center. On the basis of this analysis, 16 field interviewers were hired. An Integrated Field Management System provided reports that helped project staff manage the progress of the field interviewing effort. Once assigned to the field, cases were excluded from further outbound efforts from the call center, but could still be completed on the Web or by telephone if sample members called the help desk to complete the interview. See section 3.4.1 Student Interview Response Rates for results of field, telephone, and web interviews.

3.2.5 Other Procedures to Maximize Locating and Interview Response

Throughout data collection the B&B project team continued to work with TOPS and other available resources to evaluate additional tracing efforts that could benefit B&B data collection. In addition to the locating sources and methods already described, B&B:08/09 used several other procedures to maximize locating and interview response.

Other locating methods. Other locating methods used to find sample members included:

- *Experian credit header search.* In January 2010, an Experian credit header search was conducted to obtain phone numbers and addresses associated with sample members according to their credit histories. This search, conducted for sample members who had not yet been located or were located but not reached for several weeks, provided a relatively low-cost alternative to other intensive tracing methods.
- *Additional in-house tracing of field cases.* Field cases that resulted in dead-end information were sent back through TOPS for additional leads. Cases for which additional leads were identified through this special tracing effort were returned to the field, and those for which no new information was found were closed. The results of this special tracing effort are described in more detail in section 3.4.1.

Other contacting methods. Text messaging, social networking (Facebook and MySpace), and an informational video were additional methods used to contact sample members and encourage interview completion.

- *Text messages.* Some sample members were contacted by Short Message Service technology, or text messaging. A text message reminder to complete the B&B:08/09 interview was sent during the early response data collection period to those sample members who had requested on their address update sheet that a text message be sent. The text message mentioned the B&B interview and included the help desk number, the early incentive expiration date, and the incentive amount available. The text messages were sent via e-mail addresses that were based on the sample member's phone number and their service provider.
- *Social networking.* Two popular social networking sites, Facebook and MySpace, were used to generate new leads for and make contact with sample members who were difficult to locate. B&B:08 cohort information on record—such as postsecondary institutions attended, city/state networks and e-mail addresses—was used to search for sample members on Facebook or MySpace. Once the targeted individual was believed to be found, a message describing B&B and the incentive being offered, as well as reminding the individual of any past participation in the study, was sent through internal messaging

on the social networking site. Although the message included the study website and help desk telephone number, no personally identifying information (such as login information) was included; this information could only be provided to a sample member who visited the study website or contacted the help desk and verified his or her identity. Efforts to contact sample members by Facebook were ceased because of restrictions on the number of messages sent to individuals. When few B&B messages were opened by sample members contacted through MySpace, the use of social networking sites was abandoned in favor of the other, more promising locating and contacting methods.

- *YouTube video.* Near the end of B&B:08/09 data collection, RTI developed a brief video designed to encourage participation of sample members who had not yet completed the interview. This video was posted to YouTube, a website popular with the age group that makes up most of the B&B:08/09 sample. The video provided information about the study, including confidentiality procedures. The video also mentioned the incentive amount being offered.¹⁵ Sample members who had not yet completed the interview were sent an e-mail on January 25, 2010, with a link to the video. Mention of the video, along with a shortened web page address that redirected visitors to the video's web page, was also included in a mailing sent on February 11, 2010. Before posting the video, project staff adjusted the account and video settings including turning off features to prevent sample members from identifying one another.

3.3 Data Collection Quality Control

A number of quality control procedures were implemented throughout the course of the B&B:08/09 student interview data collection. These procedures included frequent interview monitoring of telephone interviewers, a help desk that tracked and resolved difficulties encountered by sample members attempting to complete the web interview, quality circle feedback meetings, and help desk agent and interviewer debriefings at the conclusion of the study.

3.3.1 Interview Monitoring

Regular monitoring of telephone interviews during B&B:08/09 data collection was conducted to meet the following important data quality objectives:

- Identification of problem items in the interview;
- Reduction in the number of interviewer errors;
- Improvement in interviewer performance through reinforcement of effective strategies; and
- Assessment of the quality of the data collected.

QCS and project staff monitored live and recorded interviews throughout data collection, using remote monitoring telephones and computer equipment. To guarantee an accurate reflection of data collection activities, QCS monitored day, evening, and weekend shift interviewers. In addition, each week QCS and interview project staff monitored one live interview session and one recorded interview session. The live session allowed for monitoring of calls and interviews in progress, including remotely viewing interviewers' computer screens as they progressed through the

¹⁵ Because two different incentive amounts were being offered based on base-year response status, two versions of the video were created so that the correct incentive offer was mentioned to each sample member.

interview and listening to interviews in real time, while the session with recorded interviews allowed only listening to the interview but guaranteed an opportunity to hear complete interviews. QCS and interview project staff recorded observations on standardized monitoring forms that covered such topics as interviewer professionalism, question administration, and knowledge of the instrument. After each monitoring session, interviewers received feedback based on observations from the session. Issues and trends identified during monitoring were frequently incorporated into quality circle meetings to improve the quality of telephone interviews.

3.3.2 Help Desk

A help desk, described in Section 3.2.4, was available to sample members. To gain a better understanding of the problems encountered by sample members, HDAs used a web-based application to record each help desk incident that occurred during data collection. For each incident, an HDA confirmed contact information for the sample member, noted the source (e.g., incoming telephone call, voice mail, or email; request from the study website), recorded the type of problem, provided a description of the problem and resolution, and indicated the incident status (pending or resolved). If the problem was not resolved immediately, the HDA scheduled a follow-up appointment.

Table 11 provides a summary of help desk incidents encountered during B&B:08/09 data collection. HDAs handled a total of 460 help desk incidents. The most common type of incident was from sample members requesting their study ID, password, or both (68 percent). Pop-up blocker issues were the second most common category (13 percent).

Table 11. Help desk requests, by type of incident reported: 2009

Type of incident reported	Help desk incidents	
	Number	Percent
Total	460	100.0
Study ID/password request	320	68.4
Pop-up blocker issues	60	13.4
Browser settings/computer	20	4.5
Website down/unavailable	10	2.2
Questions about the study	10	2.2
Questionnaire content	10	1.7
Routing/skip problems	10	1.5
Program error call-in	#	0.6
Other incidents, not classifiable	30	5.4

Rounds to zero.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

3.3.3 Quality Circle Meetings

Quality circle meetings were essential as part of a feedback loop for ensuring that project staff, CCS, and telephone interviewers were communicating on a regular basis about the goals of the study and addressing challenges encountered along the way. These meetings provided a forum for discussing elements of the instrument design and interview cooperation tactics, motivating the group toward the goals of the study, and acquiring feedback on data collection issues. Weekly quality circle

meetings for telephone staff were held at the call center, while quality circle meetings for the field staff were held via conference call. Issues discussed at the quality circle meetings were added to weekly quality circle notes, which all interviewers were required to access electronically. The quality circle notes included counts of interview completions to date, separate sections for general data collection issues and issues specific to the survey instrument, and project staff responses to questions from interviewers.

Throughout the study, a variety of issues were addressed at the quality circle meetings that reinforced specific content from training and contributed to prompt problem solving. Some of the issues covered in quality circle meetings included the following:

- clarification of questions and item responses and reinforcement of positive interviewing techniques;
- methods of gaining cooperation from sample members and *gatekeepers* (e.g., parents and roommates);
- problem sheets submitted by interviewers during interviews;
- the importance of interviewers providing and reviewing detailed case comments;
- data security protocols; and
- study progress and general morale boosting.

B&B:08/09 used an interactive, activity-based quality circle meeting format. In the new meeting structure, interviewers participated in training activities intended to make meetings more engaging and to improve the quality of data collected from telephone interviews. Debriefing of interviewers showed that they generally enjoyed the new quality circle meeting format and often attributed improvements in their interview times and knowledge to these training activities.

3.3.4 Debriefing

At the conclusion of the B&B:08/09 data collection, project staff held debriefing meetings with interviewers and HDAs. In the debriefings, interviewers were asked their opinions on the effectiveness of interviewer training; the success of the various techniques for tracing, locating, and gaining sample member cooperation; and any difficulties associated with administering the student interview. Interviewer feedback on their experience conducting the B&B student interview was typically positive, and interviewers provided several useful recommendations for future data collections.

Interviewers suggested that future trainings could include spending more time on techniques for converting sample member refusals to participate in the student interview and for gaining cooperation from *gatekeepers*. Regarding student interview administration, interviewers indicated that the new quality circle meeting format, which included varied training activities, was beneficial because it allowed for increased communication between interviewers and project staff and because activities were interesting as well as informative. Interviewers suggested that for future studies, quality circle meetings continue to focus on the difficulties associated with administering interviewer coders, particularly the occupation and industry coders. Interviewers also noted that quality circle meetings were a useful time to work on improving interviewing skills such as keeping sample members engaged during interviews.

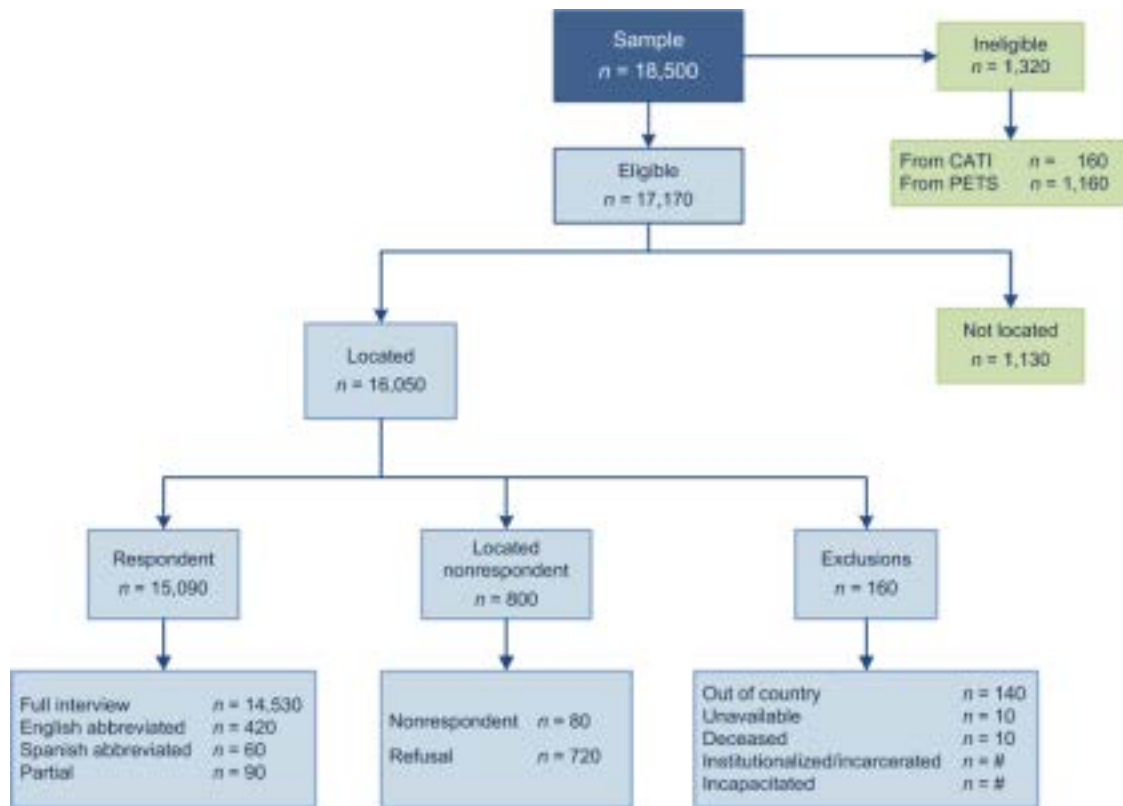
3.4 Student Interview Data Collection Outcomes

This section provides the results of the B&B:08/09 student interview data collection. Details of the overall student interview response rate of 88 percent are included, and a description of the success of various locating methods is also provided. A timing analysis shows that the student interview, on average, took about 28 minutes to complete.

3.4.1 Student Interview Response Rates

B&B:08/09 interviews were conducted from July 13, 2009 to March 12, 2010. Of the 17,170 eligible sample members in the B&B:08 cohort, 16,050 (93 percent) were successfully located and asked to complete the B&B:08/09 interview, while 15,090 (88 percent) did complete a full interview, an English or Spanish abbreviated interview, or a partial interview.¹⁶ The overall locating and interviewing results for the B&B:08/09 interview data collection effort, including sample members who were determined ineligible and those located but later considered exclusions for reasons such as being incapacitated or deceased, are presented in figure 6.

Figure 6. Overall locating and interviewing results: 2009



Rounds to zero.

NOTE: Detail may not sum to totals because of rounding. PETS = Postsecondary Education Transcript Study. CATI = computer-assisted telephone interviewing.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

¹⁶ A partial interview was any B&B:08/09 interview where the respondent completed at least through the second section (Undergraduate Education) of the interview, but did not complete the interview.

Response rates by base-year status and institution type. NPSAS:08 interview respondents were located and completed the B&B:08/09 interview at a higher rate than NPSAS:08 interview nonrespondents.¹⁷ NPSAS:08 interview respondents had a locate rate of 94 percent, while 72 percent of NPSAS:08 nonrespondents were located. Of all NPSAS:08 respondents, 89 percent completed the B&B:08/09 interview, while 49 percent of NPSAS:08 nonrespondents completed the B&B:08/09 interview.

Overall locate rates for the B&B:08/09 interview, based on the institution type of the sample member's base-year interview (NPSAS) school,¹⁸ ranged from 90 percent (private, for-profit 2-year or more schools) to 94 percent (public 4-year doctorate-granting schools, private, nonprofit 4-year non-doctorate-granting schools and private, nonprofit 4-year doctorate-granting schools). Overall response rates for the B&B:08/09 interview, by NPSAS institution type, ranged from 85 percent (private, for-profit 2-year or more schools) to 89 percent (private, nonprofit 4-year non-doctorate-granting schools). Locating and participation results by NPSAS:08 respondent status and NPSAS institution type are presented in table 12.

Table 12. Locating and participation rates, by base-year response status and NPSAS institution type: 2009

Base-year response status and institution type	Eligible sample	Located		Interviewed		
		Number	Percent of total	Number	Percent of located	Percent of total
Total	17,170	16,050	93.4	15,090	94.0	87.9
Base-year response status						
NPSAS:08 respondent	16,720	15,720	94.0	14,870	94.6	88.9
NPSAS:08 nonrespondent	460	330	71.6	220	68.2	48.8
Institution type						
Public						
2-year	#	#	50.0	#	100.0	50.0
4-year non-doctorate-granting	2,590	2,410	92.9	2,260	93.8	87.1
4-year doctorate-granting	7,320	6,870	93.8	6,450	93.9	88.1
Private nonprofit						
4-year non-doctorate-granting	3,170	2,980	94.0	2,810	94.5	88.8
4-year doctorate-granting	3,200	2,990	93.6	2,810	93.9	87.9
Private for-profit, 2-year or more						
	900	810	90.0	770	94.9	85.4

Rounds to zero.

NOTE: Detail may not sum to totals because of rounding. NPSAS = National Postsecondary Student Aid Study. SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Response rates by base-year status and interview type. About 96 percent of all B&B:08/09 interview respondents completed the full interview, about 3 percent completed an English or Spanish abbreviated interview, and less than 1 percent completed a partial interview. NPSAS:08 interview respondents completed a full interview at a higher rate (97 percent) than NPSAS:08 interview nonrespondents (63 percent). Thirty-five percent of NPSAS:08 interview

¹⁷ A *completed* interview is a full interview, an English or Spanish abbreviated interview, or a partial interview.

¹⁸ Locate and response rate results include only institution sectors with more than 5 eligible sample members.

nonrespondents completed an English abbreviated interview, compared with 2 percent of NPSAS:08 interview respondents. Table 13 provides detail on the number and percent of completed B&B:08/09 interviews by base-year response status and interview type.

Table 13. Completed interviews, by base-year response status and interview type: 2009

Base-year response status	Total	NPSAS:08 respondents		NPSAS:08 nonrespondents	
		Number	Percent	Number	Percent
Total	15,090	14,870	100.0	220	100.0
Full	14,530	14,390	96.8	140	63.2
English abbreviated	420	340	2.3	80	35.0
Spanish abbreviated	60	60	0.4	#	#
Partial Interview	90	80	0.5	#	1.8

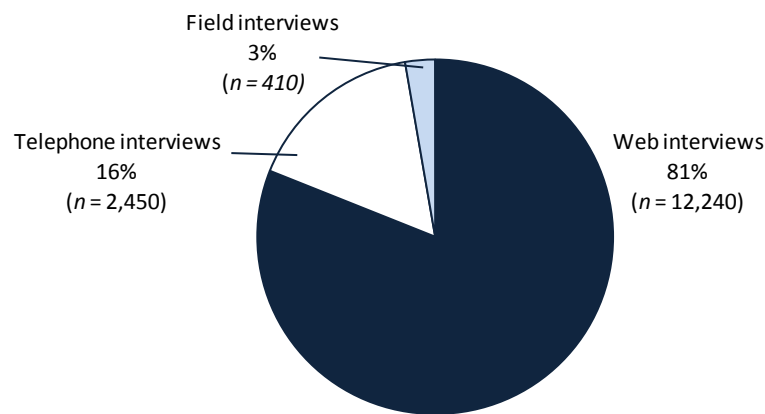
Rounds to zero.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Interview outcomes by mode. B&B:08/09 interviews were completed in one of three modes: web, telephone, or field. Figure 7 shows that most (81 percent) interviews were completed on the Web, 16 percent of interviews were completed by telephone, and 3 percent were completed in field interviewing.

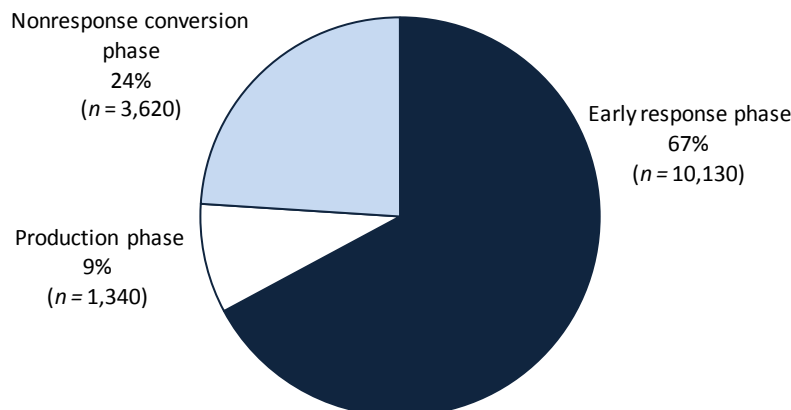
Figure 7. Distribution of completed interviews, by mode of administration: 2009



NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Response by phase of data collection. Two-thirds (67 percent) of all completed B&B:08/09 interviews and over three-fourths (80 percent) of web interviews were completed during the early response phase. Approximately 9 percent of all interviews were completed during the production phase, and the remaining 24 percent were completed during the nonresponse conversion phase. Response, by phase of data collection, is shown in figure 8.

Figure 8. Percentage of completed interviews, by data collection phase: 2009

NOTE: Partial interviews were not included because partially completed interviews could be resumed by sample members through the end of data collection.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

The *early response phase* of data collection yielded a 59 percent response rate for the eligible sample of 17,170. In this phase, base-year respondents received \$30 to complete the student interview while base-year nonrespondents received \$50 to complete the interview. In the next phase of data collection, the *production phase*, no incentive was offered. Of the 7,040 eligible sample members remaining in the production phase, 19 percent completed the interview. In the final phase of data collection, the *nonresponse conversion phase*, 64 percent of the remaining 5,700 eligible sample members completed the interview. Sample members who completed the interview in this last phase of data collection received either \$30 if they were base-year respondents, or \$50 if they were not. Table 14 provides the number of completed interviews in each data collection phase and the percent of the eligible sample in each phase that completed interviews.

Table 14. Number of cases and completed interviews within each phase of data collection: 2009

Data collection phase (incentive)	Number of cases	Completed interviews	
		Number	Percent of cases
Total	17,170	15,090	87.9
Early response phase (\$30/\$50)	17,170	10,130	59.0
Production phase (\$0)	7,040	1,340	19.0
Nonresponse conversion phase (\$30/\$50)	5,700	3,620	63.5

NOTE: Partial interviews were not included because partial status could not be assigned until the end of data collection. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Locate and response rates by source of address update. Address updates for the B&B:08 cohort were received from 6,780 eligible sample members in response to the parent initial contact mailing (for sample members younger than age 26), the student advance notification mailing, or through the B&B website. If an address update was received, the sample member was located almost 100 percent of the time and the sample member then completed the B&B:08/09 interview 98 percent of the time. Parents and students responded equally to the parent mailing and advance notification mailing (each mailing yielded a 26 percent update). Student address updates through the

B&B website constituted about 18 percent of the updates. The parent reminder letter sent on November 30, 2009 elicited a website address update from about 1 percent of those sent the letter. Locating and interviewing outcomes of cases for whom an address update was provided are shown in table 15.

Table 15. Located and interview completion rates, by source of address update: 2009

Source of address update	Number that provided an update	Located		Interviewed	
		Number	Percent	Number	Percent
Total	6,780	6,730	99.2	6,660	98.2
Parent mailing	2,260	2,230	98.9	2,200	97.6
Advance notification mailing	3,290	3,260	99.2	3,230	98.4
B&B student website reply	1,210	1,210	99.9	1,200	99.5
B&B parent website reply	30	30	91.2	30	85.3

NOTE: Parent website replies are in response to a parent reminder mailing sent on November 20, 2009. Detail may not sum to totals because of rounding. B&B = Baccalaureate and Beyond Longitudinal Study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Response rates by intensive tracing. Among the cases assigned to intensive tracing, TOPS-1 and TOPS-2, approximately 77 percent were located. Of those cases located through intensive tracing, about 45.8 percent completed the B&B:08/09 interview (table 16). About 19 percent of the cases assigned to intensive tracing required TOPS-2 tracing.

Table 16. Located and interviewed rates of cases requiring intensive tracing, by intensive tracing method: 2009

Intensive tracing status	Total	Located in TOPS		Interviewed	
		Number	Percent of total	Number	Percent of located
Total	1,210	930	77.1	430	45.8
TOPS-1	1,210	870	72.2	400	46.1
TOPS-2 ¹	240	130	53.6	40	30.2

¹ TOPS-2 cases are a subset of TOPS-1 cases that require additional intensive tracing efforts.

NOTE: Table includes only eligible cases. Detail may not sum to totals because of rounding. TOPS = tracing operations.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Response rates by other locating methods. Although no quantifiable locating or interviewing outcomes were achieved through the use of social networking sites, nearly three-fourths (72 percent) of the cases sent through the Experian credit header searches or that were field cases receiving additional tracing were located. Eighteen percent of these located cases completed the interview. Results of these other locating methods are summarized in table 17.

Table 17. Located and interviewed response rates, by other locating methods: 2009

Locating method	Cases traced	Located		Interviewed	
		Number	Percent of traced	Number	Percent of located
Total	90	70	71.7	10	18.2
Experian credit header searches	50	30	58.3	10	17.9
Tracing of field dead-ended cases	40	40	86.4	10	18.4

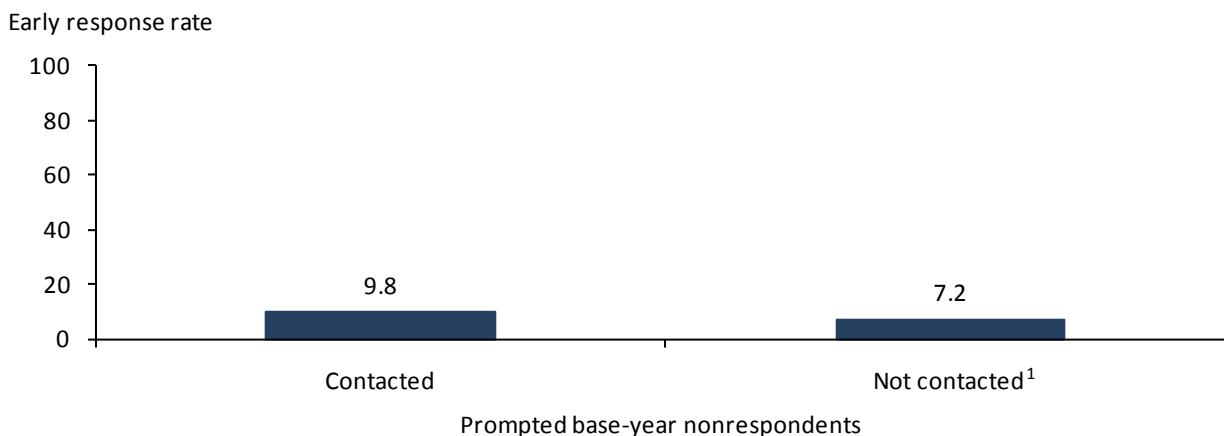
NOTE: Table excludes cases determined to be ineligible. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Of the 80 eligible sample members who received an early text message notifying them that data collection had begun, 96 percent completed the interview. These were sample members who had requested a text notification reminder of the start of data collection on their address updates.

Prompting response rates. Base-year nonrespondents were selected to receive prompting calls to complete the web interview during the early response phase of data collection. Of the 460 eligible base-year nonrespondent cases, 380 cases (82 percent) were flagged for prompting. (The remaining 80 cases were not prompted because of either missing/invalid telephone numbers or because a B&B:08/09 interview was completed prior to the start of prompting.) Prompting calls began 8 days after the start of data collection, and 260 cases were successfully prompted. For those successfully prompted, there was not a significant difference between the response rate during the early response phase of data collection for sample members who were contacted (spoken to directly) in a prompting call (10 percent), compared with sample members who were not contacted (not spoken to directly; 7 percent). The response rates during the early response phase of data collection for base-year nonrespondents who were contacted when prompted versus those who were not contacted when prompted are compared in figure 9.

Figure 9. Early response rates for base-year nonrespondents who were prompted: 2009



¹ A sample member was considered *not contacted* when someone other than the sample member was reached or the call was directed to an answering machine or voicemail.

NOTE: Counts include only eligible cases that were considered successfully prompted (spoke with someone or left an answering machine message). Excludes ineligible cases, cases completed before prompting began, cases without a phone number, and cases unsuccessfully prompted due to no answer or a dead-end number.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Response rates for field cases. Beginning about 5 months into data collection, cases identified as difficult to locate but believed to reside in a selected field cluster were assigned to field data collection. Of the 920 eligible cases assigned, 68 percent were located and 60 percent completed the interview in one of the three available modes (web, telephone, or field). Of the completed cases assigned to the field, 150 (26 percent) were actually completed by web, or by telephone through the call center, instead of through field efforts.

Results by base-year response status and NPSAS institution type are also presented for these cases. Nearly 62 percent of base-year respondent cases assigned to the field completed the interview compared with 42 percent of base-year nonrespondent cases assigned to the field.

Response rates among eligible cases assigned to the field also varied by sample members' NPSAS institution type. The largest number of cases assigned to the field for any one institution type, 370 cases, was for sample members whose NPSAS institution was a public 4-year doctorate-granting institution; these cases yielded a response rate of 59 percent. Only 70 cases were assigned to the field for sample members from private, for-profit, 2-year-or-more schools; these cases yielded a response rate of 62 percent. Table 18 shows locate and response rates among the field cases.

Table 18. Located and completed field interview cases, by base-year response status and institution type: 2009

Base-year response status and institution type	Number assigned to field	Located		Number completed interviews			Percent completed interviews		
		Number	Percent	Field	Web or help desk	All modes	Field	Web or help desk	All modes
Total	920	630	67.8	410	150	550	44.3	15.7	60.0
Base-year response status									
NPSAS:08 respondent	840	580	69.3	380	140	520	45.6	16.2	61.8
NPSAS:08 nonrespondent	80	40	52.4	30	10	40	31.0	10.7	41.7
Institution type									
Public									
4-year non-doctorate-granting	150	110	69.9	70	20	90	44.4	15.0	59.5
4-year doctorate-granting	370	250	67.1	170	50	220	45.5	13.9	59.4
Private nonprofit									
4-year non-doctorate-granting	160	110	64.0	60	30	90	36.6	20.7	57.3
4-year doctorate-granting	170	120	70.9	80	30	110	48.5	15.2	63.6
Private for-profit, 2-year or more	70	50	68.2	30	10	40	45.5	16.7	62.1

NOTE: Sample members were still able to complete the web interview or call the help desk to complete a telephone interview once a case was sent to the field. Detail may not sum to totals because of rounding. NPSAS = National Postsecondary Student Aid Study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

3.4.2 Interview Timing Burden

Several analyses for the B&B:08/09 interview assessed the timing burden on respondents completing the interview. These analyses included computation of the overall average time it took respondents to complete the interview and the time it took respondents to complete the interview based on mode of administration (web, telephone or field), as well as analysis of whether particular respondent characteristics, such as employment or teacher status, were related to interview timing burden.

To calculate the time it took to complete the interview, two time stamps were embedded on each form (web screen) of the interview. A start timer recorded the clock time on the respondent's or interviewer's computer when each form was first displayed. An end timer recorded the clock time on the respondent's or the interviewer's computer when the *Next* button on each form was clicked. From the two time stamp variables, an on-screen time and a transit time were calculated. The on-screen time was calculated by subtracting the start time from the end time for each form that the respondent saw. The transit time was calculated by subtracting the end time of the preceding form from the start time of the next form. Total on-screen time and total transit time were calculated for all respondents by summing all of the on-screen times for each screen received and summing all of the transit times for each respondent. Total instrument time was then calculated by summing a respondent's total on-screen and total transit times.

The timing analysis included only cases that completed the full-scale interview in one session. Partially completed interviews and those interviews completed in multiple sessions (i.e., those cases that logged out from an incomplete interview and later resumed their interviews) were excluded from the analysis.

The average overall interview time was calculated by summing the respondents' interview completion times and dividing the result by the total number of respondents. On average, the B&B:08/09 interview took 27.7 minutes to complete. Web interviews took 26.6 minutes to complete, field interviews took 31.1 minutes to complete, and telephone interviews took 33.5 minutes to complete.

Average section completion times were 1.4 minutes for the Front End (introductory section), 1.1 minutes for Eligibility, 7.2 minutes for Undergraduate Education, 2.2 minutes for Postbaccalaureate Education/Training, 6.8 minutes for Postbaccalaureate Employment, 3.6 minutes for Kindergarten-12th Grade Teaching, and 3.8 minutes for Student Background. On average, all sections took the longest in telephone mode. Table 19 shows the average interview time overall, for each section, by mode of administration.

Table 19. Average time in minutes to complete interview section, by mode of administration: 2009

Interview section	All respondents		Mode of administration					
			Web		Telephone		Field	
	Number of cases	Average time	Number of cases	Average time	Number of cases	Average time	Number of cases	Average time
Total interview	12,090	27.7	10,140	26.6	1,750	33.5	200	31.1
Front End	12,090	1.4	10,140	1.0	1,750	3.8	†	†
Eligibility	12,090	1.1	10,140	1.1	1,750	1.2	200	1.0
Undergraduate Education	12,090	7.2	10,140	6.9	1,750	9.1	200	7.2
Postbaccalaureate Education/Training	12,090	2.2	10,140	2.2	1,750	2.4	200	1.9
Postbaccalaureate Employment	9,750	6.8	8,140	6.6	1,440	7.7	170	7.2
K–12 Teaching	3,700	3.6	3,030	3.3	600	4.7	70	4.1
Student Background	12,090	3.8	10,140	4.7	1,750	6.1	200	5.6

† Not applicable.

NOTE: Interview times are presented only for completed interviews; partial interviews and multisession completions were excluded. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond (B&B:08/09).

Interview time by interview path. The time it took respondents to complete the B&B:08/09 interview varied by whether respondents had any postbaccalaureate employment, and by whether they had taught since receiving their bachelor's degree.

The Postbaccalaureate Employment section focused on the job(s) held in the year after completing a bachelor's degree. This section collected information regarding current job duties, benefits and requirements, and periods of unemployment, if applicable. On average, the Postbaccalaureate Employment section took 5.8 minutes to complete. Table 20 shows that respondents who were employed spent longer in the employment section (6.8 minutes) compared to those respondents who were not employed (1.7 minutes).

Table 20. Average time to complete interview, by employment status: 2009

Employment status	Number of respondents	Average time (minutes)
Total	12,090	5.8
Not employed	2,340	1.7
Employed	9,750	6.8

NOTE: Interview times are presented only for completed interviews; partial interviews and multisession completions were excluded. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

The K-12 Teaching section collected information about the respondent's experiences with or interest in teaching kindergarten through the 12th grade. Table 21 shows respondents who had never been a teacher and were not planning or preparing to become a teacher took an average of 0.4 minutes to complete the section. Respondents who were current or former teachers, or who were either considering or preparing for teaching, took 3.6 minutes. The latter group is divided even

further between current teachers (6.5 minutes), former teachers (5.1 minutes), respondents preparing to become teachers (2 minutes), and respondents considering becoming teachers (1.5 minutes).

Table 21. Average time to complete interview, by teacher status: 2009

Teacher status	Number of respondents	Average time (minutes)
Total	12,090	1.4
Not a teacher and not planning or preparing to teach	8,390	0.4
Currently, formerly, preparing to, or considering teaching	3,700	3.6
Currently teaching	920	6.5
Formerly teaching	730	5.1
Preparing to teach	950	2.0
Considering teaching	1,100	1.5

NOTE: Interview times are presented only for completed interviews; partial interviews and multisession completions are excluded. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Timing of abbreviated interview. The abbreviated version of the B&B:08/09 interview included the Front End, Eligibility section, and questions from the other sections of the interview. Table 22 shows that, on average, the B&B:08/09 abbreviated interview took 13.6 minutes. Overall, web abbreviated interviews took 11.8 minutes and were significantly shorter than telephone abbreviated interviews, at 16.9 minutes ($t(313) = -7.38, p < .001$). Telephone interviews were significantly longer than field interviews at 12.5 ($t(212) = 5.08, p < .001$).

Table 22. Average time in minutes to complete abbreviated interview, by interview section and mode of administration: 2009

Interview section	All respondents		Mode of administration					
			Web		Telephone		Field	
	Number of cases	Average time	Number of cases	Average time	Number of cases	Average time	Number of cases	Average time
Total interview	400	13.6	190	11.8	130	16.9	80	12.5
Front End	400	2.2	190	1.4	130	4.8	†	†
Eligibility	400	1.3	190	1.4	130	1.4	80	0.8
Undergraduate Education	400	1.6	190	1.4	130	1.8	80	1.8
Postbaccalaureate Education/Training	400	0.4	190	0.3	130	0.4	80	0.3
Postbaccalaureate Employment	400	2.2	190	2.6	130	1.8	80	2.2
K-12 Teaching	400	0.2	190	0.2	130	0.2	80	0.2
Student Background	400	0.2	190	0.2	130	0.1	80	0.2

† Not applicable.

NOTE: Interview times are presented only for completed abbreviated interviews; partial interviews and multisession completions were excluded. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

3.4.3 Telephone Interviewer Hours

During the course of B&B:08/09 data collection, 9,291 telephone interviewer hours were logged, for an average of 3.79 hours spent by telephone interview staff per completed or partial telephone interview. Because, on average, telephone interviews took 33.5 minutes to administer, most of the telephone interviewer hours were spent on case management activities. These activities included locating and contacting sample members, prompting sample members to complete interviews, reviewing call history, scheduling callbacks, entering detailed comments and suggestions to assist with reaching and interviewing sample members, and responding to incoming help desk calls. Near the end of data collection, telephone interviewers also spent about two weeks intensively reviewing nonrespondent cases to identify the most appropriate next step for each case.

3.4.4 Number of Calls to Sample Members

On average, nine calls were made per B&B:08/09 sample member during the interviewing period, except for in the early response phase when no outbound calls were made to sample members. The average number of calls per sample member varied according to B&B:08/09 response status, base-year response status, mode of administration, and phase of data collection. Cases that completed a B&B:08/09 interview received an average of 6 calls, while nonrespondents received an average of 32 calls during the interviewing period. Base-year respondents received 9 fewer calls, on average, than base-year nonrespondents (9 and 18, respectively) ($t(478) = 10.98$, $p < .001$).

There were also call count differences depending on mode of interview administration. Overall, respondents who completed interviews over the telephone required more calls than respondents who completed interviews over the web, an average of 14 calls, compared with 3 calls ($t(2,898) = 33.50$, $p < .001$). However, when early response phase interview completes were excluded, web respondents required more calls than telephone respondents, an average of 17 calls, compared with 14 calls ($t(4,836) = 8.91$, $p < .001$). The average number of telephone calls is shown in table 23.

Table 23. Average number of calls, by response status: 2009

Response status	Eligible cases	Number of calls	Average number of calls
Total	17,170	153,700	9.0
Base-year response status			
NPSAS:08 respondent	16,720	145,700	8.7
NPSAS:08 nonrespondent	460	8,010	17.5
B&B:08/09 response status			
Respondents			
Web interviews	12,240	42,070	3.4
Excluding early response	2,410	42,040	17.4
Telephone interviews	2,450	33,380	13.7
Field interviews	410	10,780	26.4
Nonrespondent or exclusion	2,080	67,470	32.4

NOTE: Detail may not sum to totals because of rounding. NPSAS = National Postsecondary Student Aid Study.

B&B = Baccalaureate and Beyond Longitudinal Study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

3.5 Evaluation of Student Interview Items

An evaluation of the B&B:08/09 student interview items included analyses of the data collected in the instrument coders and a review of help text access rates, success rates for conversion text, and item nonresponse.

3.5.1 Instrument Coders

Assisted coding systems were used to standardize the collection of data on, and code, any postsecondary schools attended, major or field of study, occupation, and any elementary or secondary schools where the respondent may have taught. Text strings were collected from the respondent, and then a keyword search of an underlying database was conducted, allowing the respondent to select the best option from a list of possible options returned. An assisted coding system was not used to code industries, but available industry classifications allowed respondents and interviewers to select an industry classification from among a list of standardized options (for a detailed description of each coder, see section 3.1.1).

Recoding. Ten percent of the major, occupation, and industry codes chosen in the student interviews were randomly selected to be reviewed by expert coding staff for *recoding*.¹⁹ Expert coders assessed the accuracy of codes chosen in the interview based on the text string provided by the respondent. Across modes of administration and across coders, expert coding staff generally agreed with the codes chosen for text strings in the interview. Overall, expert coders agreed with major, occupation, and industry codes chosen in the student interview 90 percent of the time, recoded codes chosen to a new value 7 percent of the time, and were unable to choose a code based on too vague a text string about 3 percent of the time.

Only the industry coder showed significant differences in recode rates between modes of administration. Expert coders agreed with industry codes chosen by web respondents 79 percent of the time and with those chosen by interviewers 90 percent of the time ($\chi = 4.24, p < .001$). Expert coders recoded industry codes chosen by web respondents 17 percent of the time, and recoded those chosen by telephone and field interviewers 7 percent of the time ($\chi = 4.65, p < .001$). Industry text strings provided by web respondents and were too vague to code 4 percent of the time, as were industry text string provided by interviewers. Table 24 shows the rate of recoded values—same as original code, recoded to different value, or text string too vague to code—chosen by the expert coders for the major, occupation, and industry codes in the interview.

¹⁹ Recoding of institution codes selected in the postsecondary and elementary and secondary school coders was not done because text strings provided by respondents would presumably have directly matched school name codes chosen. In the major, occupation, and industry coders, text strings provided by respondents and standardized names of codes in the database were often not direct matches.

Table 24. Summary of recoding results, by coding system and administration mode: 2009

Coding system	Percent of recoded values					
	Recoded same as original		Recoded to different value		Text string too vague to code	
	Web	Telephone and field	Web	Telephone and field	Web	Telephone and field
Major	98.2	97.0	1.0	1.4	0.8	1.6
Occupation	91.2	89.7	5.7	7.2	3.1	3.1
Industry	78.9	89.6	17.3	6.6	3.8	3.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Upcoding. Project staff chose an appropriate code for any text strings provided by respondents or interviewers for which a code was not selected in the IPEDS, major, occupation, industry, and elementary/secondary school coders. Text strings from web interviews generally required more upcoding than text strings from telephone and field interviews because interviewers received special training on coders. Results of the upcoding process are shown in table 25.

Table 25. Summary of upcoding results, by coding system and administration mode: 2009

Coding system	Percent upcoded		
	Overall	Web	Telephone and field
IPEDS Institutions	9.1	10.4	4.0
Major	3.5	4.1	0.9
Occupation	3.6	4.3	0.9
Industry	3.8	4.8	0.1
Elementary/secondary schools	8.6	9.3	5.8

NOTE: IPEDS = Integrated Postsecondary Education Data System.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

3.5.2 Help Text

Respondents or interviewers were able to click on a help button provided on each B&B:08/09 interview screen for both general instrument and question-specific help. The general instrument help provided answers to FAQs about web browser settings and response types (i.e., how to respond using a check box, dropdown box, or radio button). The question-specific help provided definitions of key terms and phrases used in question wording and response options and provided any other explanations thought to help clarify and standardize the meaning of questions for respondents.

The number of times that respondents or interviewers clicked the help button on each screen relative to the number of respondents who were administered the question determined the rate of help text access for that screen. The screen-level rate of help text access was analyzed overall and by mode of interview administration to identify screens that may have been problematic for users. For forms administered to at least 50 respondents, the overall mean rate of help text hits per screen was less than 1 percent. Help text was accessed 2 percent of the time during interviews by telephone and field, compared with 1 percent of the time by web respondents ($\chi = 13.30, p < .001$).

The interview question asking respondents for their employer’s primary industry (item name RDINDCD) had the highest overall rate of help text access, at 4 percent. The help text for this question was accessed 16 percent of the time by telephone and field interviewers, compared with 1 percent of the time by web respondents ($\chi = 30.99, p < .001$). It is worth noting here that interviewers were encouraged as part of their training to refer to the help text on this item when respondents showed hesitation in understanding the term “industry.”

Table 26 shows the three interview questions administered to at least 50 respondents and for which help text was accessed at a rate of at least 2 percent.

Table 26. Interview questions with highest rates of help text access, by administration mode: 2009

Item	Variable label	Overall		Web		Telephone and field	
		Number administered to	Percent of help text access	Number administered to	Percent of help text access	Number administered to	Percent of help text access
RBNTPAY	Reason not currently repaying undergraduate loans	4,140	2.1	3,290	0.1	840	9.7
RDEMPOTH	Reason not working for pay	1,580	2.5	1,260	0.6	330	10.1
RDINDCD	Industry: coder	9,480	3.5	7,700	0.7	1,780	15.6

NOTE: Table is based on the rates of help text access for interviewer screens administered to a minimum of 50 respondents and in which help text was accessed at an overall rate of at least 2 percent. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

3.5.3 Conversion Text

Fifteen questions in the interview were considered *critical*; that is, responses to these questions were especially important to the study and high rates of missing data on these questions would impact the quality of these data. When respondents did not provide an answer to these questions and the *Next* button was clicked on the interview screen, then conversion language (or *conversion text*) appeared above the question to encourage a response. Interviewers were asked to read conversion text to respondents and then to reread the interview question. The conversion text attempted to relay the importance of that particular question to the study and emphasized the confidential nature of responses. Some critical questions also displayed a *don't know* response option for respondents once the conversion text was triggered.

Dividing the total number of responses to the critical questions after the conversion text was displayed by the total number of cases where the conversion text was triggered provided a conversion rate for the questions that was attributed to the conversion text. Overall, conversion text was triggered in the student interview approximately 1170 times throughout data collection. Eighty-five percent, or 1000, of these cases were converted to a response after the conversion text was displayed. The web interviews accounted for 980 of the 1170 cases where conversion text was triggered and 880 of the 1000 converted cases. The remaining 190 cases where conversion text was triggered were in telephone and field interviews, of which 120 were converted. The rate of conversion as measured by the triggering of conversion text was 90 percent in web interviews, compared with 63 percent in telephone and field interviews ($\chi = 9.75, p < .001$). There was not a

way to measure conversion to a response by telephone and field interviewers before conversion text was triggered.

Conversion text was triggered more than 100 times for three interview questions. The *occupation coder* (RDOCC1) triggered conversion text in 340 cases and yielded a conversion rate of 96 percent. Web cases were converted at a rate of 96 percent, compared with telephone and field cases, which were converted at a rate of 67 percent ($z = 2.69, p < .01$). *Monthly rent or mortgage payment amount* (RFMTGAMT) triggered conversion text in 310 cases, with a conversion rate of 69 percent. Web cases were converted at a rate of 81 percent, compared with telephone and field cases, which were converted at a rate of 39 percent ($z = 7.09, p < .001$). *Amount owed for undergraduate loans* (RBUGOWE) triggered conversion text in 120 cases, and produced a conversion rate of 84 percent with no significant mode difference. Table 27 displays the rates of conversion for all 15 items in the interview with conversion text. Conversion rates were examined overall and by mode.

Table 27. Conversion rates for critical items, by mode of administration: 2009

Item	Item description	Number of cases	Number converted	Total percent converted	Percent converted to a valid response	Percent converted to a "don't know"
Total						
RBRPYAMT	Monthly undergraduate loan payment	50	40	78.3	32.6	45.7
RBUGLN	Took out undergraduate loans	30	30	92.9	85.7	7.1
RBUGOWE	Amount owed for undergraduate loans	120	100	83.8	49.6	34.2
RCFINAID	Postbaccalaureate financial aid type	20	20	87.5	62.5	25.0
RCPSTGRD	Enrolled in any school since earning bachelor's degree	40	40	90.7	90.7	†
RDCURHRS	Hours worked weekly	30	20	96.0	72.0	24.0
RDJSTAT	Working for pay	50	50	92.0	92.0	†
RDOCC1	Occupation coder	340	330	96.2	96.2	†
RDSEARCH	Looking for a job	40	40	85.4	85.4	†
RECONSID	Currently considering career in teaching at the K-12 level	60	50	92.7	72.7	20.0
RECURCRT	Certified to teach at the K-12 level	10	10	91.7	91.7	†
REEVRTCH	Taught grades K-12 since graduating from NPSAS	40	30	91.9	91.9	†
REJBTP01	Type of K-12 teaching position 1	10	10	90.9	90.9	†
REPREPAR	Prepared for a teaching career at the K-12 level	30	30	86.7	86.7	#
RFMTGAMT	Monthly rent or mortgage payment amount	310	210	68.9	54.4	14.4
Web						
RBRPYAMT	Monthly undergraduate loan payment	30	30	87.9	27.3	60.6
RBUGLN	Took out undergraduate loans	20	20	95.0	85.0	10.0
RBUGOWE	Amount owed for undergraduate loans	80	70	86.4	56.8	29.6
RCFINAID	Postbaccalaureate financial aid type	20	20	90.5	66.7	23.8
RCPSTGRD	Enrolled in any school since earning bachelor's degree	40	40	89.7	89.7	†
RDCURHRS	Hours worked weekly	20	20	100.0	70.0	30.0
RDJSTAT	Working for pay	40	40	90.5	90.5	†
RDOCC1	Occupation coder	340	330	96.5	96.5	†
RDSEARCH	Looking for a job	40	30	83.8	83.8	†
RECONSID	Currently considering career in teaching at the K-12 level	50	50	92.0	72.0	20.0
RECURCRT	Certified to teach at the K-12 level	10	10	90.9	90.9	†
REEVRTCH	Taught grades K-12 since graduating from NPSAS	30	30	89.7	89.7	†
REJBTP01	Type of K-12 teaching position 1	10	10	90.9	90.9	†
REPREPAR	Prepared for a teaching career at the K-12 level	20	20	82.6	82.6	#
RFMTGAMT	Monthly rent or mortgage payment amount	220	180	80.7	61.9	18.8

See notes at end of table.

Table 27. Conversion rates for critical items, by mode of administration: 2009—Continued

Item	Item description	Number of cases	Number converted	Total percent converted	Percent converted	Percent converted
					to a valid response	to a “don’t know”
					Telephone and field	
RBRPYAMT	Monthly undergraduate loan payment	10	10	53.8	46.2	7.7
RBUGLN	Took out undergraduate loans	10	10	87.5	87.5	#
RBUGOWE	Amount owed for undergraduate loans	40	30	77.8	33.3	44.4
RCFINAID	Postbaccalaureate financial aid type	#	#	66.7	33.3	33.3
RCPSTGRD	Enrolled in any school since earning bachelor’s degree	#	#	100.0	100.0	†
RDCURHRS	Hours worked weekly	10	#	80.0	80.0	#
RDJSTAT	Working for pay	10	10	100.0	100.0	†
RDOCC1	Occupation coder	#	#	66.7	66.7	†
RDSEARCH	Looking for a job	#	#	100.0	100.0	†
RECONSID	Currently considering career in teaching at the K-12 level	10	10	100.0	80.0	20.0
RECURCRT	Certified to teach at the K-12 level	#	#	100.0	100.0	†
REEVRTCH	Taught grades K-12 since graduating from NPSAS	10	10	100.0	100.0	†
REJBTP01	Type of K-12 teaching position 1	#	#	#	#	†
REPREPAR	Prepared for a teaching career at the K-12 level	10	10	100.0	100.0	#
RFMTGAMT	Monthly rent or mortgage payment amount	90	30	39.1	35.6	3.4

† Not applicable.

Rounds to zero.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

3.5.4 Item Nonresponse

Rate of nonresponse was a data quality measure used to identify troublesome interview items and better understand the experiences of sample members in completing the interview. Total nonresponse rates were calculated for items with missing data (including *don’t know* responses) that were administered to at least 100 respondents. Overall, the item-level nonresponse analysis yielded 36 items out of 1,358 interview items with more than 5 percent missing data.²⁰

Items on coders returned relatively high rates of nonresponse²¹. The item with the highest rate of nonresponse, (RES DST01), was the district name on the elementary/secondary school coder. Of the 210 respondents who received this item, approximately 67 percent did not provide a text string for their elementary/secondary school’s district. Approximately 13 percent of respondents did not enter a text string for their original major in the major coder item (RBORGMAJ), 18 percent of respondents did not enter a text string for their job duties in the occupation coder item (RDJBDY), and 19 percent did not enter a text string for their employer’s industry in the industry coder item

²⁰ Partial and abbreviated interview completions and missing data for interview nonrespondents were excluded from this analysis. For interview items with multiple iterations, this analysis will evaluate the first iteration only.

²¹ Results of item nonresponse in this section apply only to the respondents to the B&B:08/09 interview and are not weighed by the B&B analysis weight. Chapter 6 provides additional details on the item nonresponse, the potential bias due to item nonresponse, and the impact of the item imputation which was used to fill in missing data and to reduce item nonresponse bias.

(RDIND). In addition, there were several income questions among those items with nonresponse rates greater than 5 percent. Approximately 42 percent of respondents did not provide an estimate of their spouses income on *spouse's income estimate for 2008* (RFINSRA), and 30 percent did not provide an amount for their private student loan debt on *amount borrowed in private undergraduate loans* (RBUGPRIV).

Item-level nonresponse rates were also examined by mode of administration. There were significant differences between the web mode and interviewer (telephone and field) modes in the nonresponse rates of 16 interview items. Notably, the following income items showed higher rates of nonresponse among telephone and field respondents than among web respondents: *income in 2008* (RFINCOM; $\chi = 12.89, p < .001$); *spouse's income in 2008* (RFINCSP; $\chi = 8.41, p < .001$); and *not married to spouse in 2008* (RFSPNOT; $\chi = 9.05, p < .001$).

In contrast, the following items on coders showed higher rates of nonresponse among web respondents than among telephone and field respondents: *NPSAS original major: string* (RBORGMAJ; $\chi = 4.65, p < .001$); *NPSAS primary major: string* (RBNPMAJ; $\chi = 6.33, p < .001$); *NPSAS second major: string* (RBNPMJ2; $\chi = 4.05, p < .001$); *postbaccalaureate degree 1 primary major: string* (RCMAJ01; $\chi = 10.48, p < .001$); *industry: coder* (RDINDCD; $\chi = 11.56, p < .001$); *[REJBTP01] school: lowest grade level offered* (RESGLO01; $\chi = 2.17, p < .05$); and *[REJBTP01] school: highest grade level offered* (RESGHI01; $\chi = 2.23, p < .05$).

Table 28 summarizes the item-level nonresponse for items administered to at least 100 respondents with a rate of at least 5 percent missing.

Table 28. Interview items with highest nonresponse rates, by mode of administration: 2009

Item	Item description	Mode of administration					
		Overall		Web		Telephone and field	
		Number administered to	Percent missing	Number administered to	Percent missing	Number administered to	Percent missing
Undergraduate Education							
RBSTER01	Stopout reason: primarily enrolled at different school	1,510	5.7	1,200	6	310	4
RBSTSC01	Stopout reason: to enroll at different school	1,510	5.7	1,200	6	310	4
RBSTAC01	Stopout reason: academic problems	1,510	5.7	1,200	6	310	4
RBSTTO01	Stopout reason: needed time off from studying	1,510	5.7	1,200	6	310	4
RBSTMI01	Stopout reason: conflicts with job/military	1,510	5.7	1,200	6	310	4
RBSTWK01	Stopout reason: work for financial reasons	1,530	6.8	1,210	8	310	4
RBSTFI01	Stopout reason: other financial reasons	1,510	5.7	1,200	6	310	4
RBSTFM01	Stopout reason: change in family status	1,510	5.7	1,200	6	310	4
RBSTPR01	Stopout reason: personal reasons	1,510	5.7	1,200	6	310	4
RBSTOT01	Stopout reason: other reasons	1,510	5.7	1,200	6	310	4
RBUGPRIV	Amount borrowed in private undergraduate loans	3,240	29.6	2,730	33	510	10
RBORGMAJ	NPSAS original major: string	650	12.6	510	16	150	1
RBNPMAJ	NPSAS primary major: string	1,290	11.9	1,050	15	240	#
RBNPMJ2	NPSAS second major: string	580	15.8	490	19	100	2
Postbaccalaureate Education/Training							
RCMAJ01	Postbaccalaureate degree one primary major: string	5,240	11.3	4,400	13	840	1
Postbaccalaureate Employment							
RDJBDY	Job duties	11,800	17.9	9,690	22	2,110	1
RDIND	Industry: string	11,800	18.8	9,690	22	2,110	5
RDINDCD	Industry: coder	9,180	11.9	7,580	14	1,600	3
K-12 Teaching							
RESCH01	[REJBTP01] school: name	210	12.4	160	11	50	17
RESCIT01	[REJBTP01] school: city	210	9.6	160	9	50	13
RESTAT01	[REJBTP01] school: state	210	5.7	160	6	50	4
RESTYP01	[REJBTP01] school: type	210	17.7	160	19	50	13
RES DST01	[REJBTP01] school: district	210	66.5	160	68	50	62
RESCNT01	[REJBTP01] school: county	210	64.6	160	68	50	53
RESGLO01	[REJBTP01] school: lowest grade level offered	210	36.8	160	41	50	23
RESGHI01	[REJBTP01] school: highest grade level offered	210	34.9	160	39	50	21
REJBOS01	Other school-related income while in [REJBTP01] position	1,340	6.2	1,070	7	270	4
REOSAM01	Time frame for other school-related income in [REJBTP01] position	390	22.3	310	25	90	13

See notes at end of table.

Table 28. Interview items with highest nonresponse rates, by mode of administration: 2009—Continued

Item	Item description	Mode of administration					
		Overall		Web		Telephone and field	
		Number administered to	Percent missing	Number administered to	Percent missing	Number administered to	Percent missing
REOTAM01	Time frame for additional income while in [REJBTP01] position	350	15.3	270	17	80	9
REMOVE	Plan to move into nonteaching job in K-12 education	4,520	35.7	3,620	42	900	10
Student Background							
RFINCOM	Income in 2008	14,490	5.3	11,930	4	2,560	11
RFINEST	Income in 2008: estimate	770	21.0	500	22	270	19
RFINCSP	Spouse's income in 2008	3,210	6.1	2,580	4	630	13
RFSPNOT	Not married to spouse in 2008	3,630	5.4	2,970	4	660	13
RFINSRA	Spouse's income in 2008: estimate	200	41.5	110	38	80	47

Rounds to zero.

NOTE: This table only includes those items that were administered to at least 100 respondents. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

3.6 Student Interview Conclusions

B&B:08/09 interviews were conducted from July 13, 2009 to March 12, 2010. Of the 17,170 eligible sample members included in the B&B:08/09 student interview data collection, 16,050, or 93 percent, were successfully located. Successful locating methods included batch searches, such as Telematch and CPS, and address update information provided by both sample members and their parents. Overall, about 7 percent of sample members required intensive tracing. Locating methods attempted during the B&B:08/09 interview included text message reminders and the use of social networking sites.

Of the 17,170 sample members included in the B&B:08/09 student interview data collection, 15,090, or 88 percent, completed a full, abbreviated (English or Spanish), or partial interview. About 96 percent of all B&B:08/09 interview respondents completed the full interview. Eighty-one percent of interviews were completed on the Web, 16 percent of interviews were completed by telephone, and 3 percent were completed in field interviewing. Eighty-nine percent of base-year respondents completed the B&B:08/09 interview, compared with 49 percent of base-year nonrespondents. Two-thirds (67 percent) of all completed B&B:08/09 interviews and over three-fourths (80 percent) of web interviews were completed during the early response phase. Base-year respondents received \$30 if they completed the interview in either the early response or nonresponse conversion phase. Base-year nonrespondents received \$50 to complete the interview.

On average, the B&B:08/09 interview took 28 minutes to complete. On average, telephone interviews took the longest to complete and the Undergraduate Education section in the interview took the longest to complete.

An evaluation of the quality of the data provided by the B&B:08/09 student interview showed that methodological features built into the instrument as well as training and supervision of interviewing staff aided in the successful administration of the interview. The design of assisted coding systems in the instrument and the training of interviewers on coders appeared successful.

Overall, expert coders agreed with major, occupation, and industry codes chosen in the interview 90 percent of the time. The appearance of help text and conversion text in the instrument also appeared to improve question response. Help text was accessed significantly more often during interviews by telephone and field interviewers than by web respondents. It should be noted that interviewers had been encouraged to use help text, as needed, as this feature of the instrument was emphasized during telephone interviewer training. Eighty-five percent of the cases where conversion text was triggered in the interview were converted to a response after the conversion text was displayed. Overall, the item-level nonresponse analysis yielded 36 items out of 1,358 interview items with more than 5 percent missing data.

Debriefing of tracers and field interviewers at the end of data collection indicated that frequent monitoring of telephone interviewers, a help desk that tracked and resolved difficulties encountered by sample members attempting to complete the web interview, and quality circle training and feedback meetings were useful as data collection quality control (QC) procedures. Most interviewers indicated that they felt they had all the tools necessary to successfully administer the B&B:08/09 student interview.

Chapter 4.

Transcript Data Collection, Outcomes, and Evaluation

B&B:08/09 collected postsecondary transcripts for the B&B:08 cohort as an official record of sample members' academic experiences, including courses taken and performance in these courses. To ease burden on participating institutions, the B&B:08/09 transcript collection was combined with the transcript collection for BPS:04/09 under PETS:09. This chapter provides an overview of the B&B:08/09 portion of the transcript collection and will describe the processes and systems developed for collecting transcripts. It will also report on transcript keying and coding activities and the data and process evaluation procedures introduced to assure data quality.

4.1 Transcript Data Collection and Response Rates

A Transcript Control System (TCS) was designed to manage the transcript and other institution data requested from the institutions attended by the B&B:08 cohort. Institution contactors (ICs) served as liaisons to institutions that provided the requested materials through a variety of possible submission methods, including a study website. Transcripts were received for a total of 17,430 students. The details of transcript data collection and response rates are included in this section.

4.1.1 Transcript Control System

The integrated, web-based TCS supported each step of the B&B:08/09 transcript collection, including project management, communications, and tracking. The TCS comprised several transcript management systems: the *Institution Contacting System* was used to store and access data on students and track efforts to obtain their transcripts; the *Data Receipt System* managed data received on sample members, including transcripts and catalogs for the institutions attended; and the *Keying and Coding System* (KCS) facilitated the efficient and secure capture of data from student transcripts. See section 4.2 for a detailed discussion of the development and use of the KCS. Transcript control system data were stored in SQL databases accessible for use in reporting, documenting and delivering transcript data.

4.1.2 Training of Institution Contactor (IC) Staff

Institution contacting staff consisted of eight ICs and two QCS who were responsible for staff supervision. Prior to the start of transcript data collection, the ICs were trained over a 2-day period on transcript and catalog collection, gaining cooperation, and problem resolution. Training included information on B&B and a review of confidentiality regulations. Activities focused on guidelines for interactions with institution staff, gaining cooperation, collection of catalogs and transcripts, and collection and receipt systems. During the transcript collection period, staff were briefed on their progress, asked questions, and discussed issues at weekly quality circle meetings. The IC training agenda is included in appendix G.

4.1.3 Transcript Collection Procedures

Transcripts were requested from the 1,100 institutions where B&B sample members completed their bachelor's degree requirements during the 2007–08 academic year (their NPSAS institution). A complete transcript was requested from this institution for each student.

Beginning in late October 2008, a transcript request packet was sent to the director of the institution research office at each institution. In the absence of an office of institution research, packets were sent to the registrar's office. The packet contained notification materials for transcript data collection (see appendix H), including the following:

- a letter introducing PETS:09;
- an introductory letter from NCES;
- a letter of endorsement from the American Association of Collegiate Registrars and Admission Officers;
- a list of other endorsing agencies;
- information regarding how to log on to the study's secure website;
- descriptions of and instructions for the various methods of providing transcripts; and
- excerpts from the Family Educational Rights and Privacy Act that illustrated the transcript collection's compliance with the legislation.

Follow-up calls by trained ICs were placed 2 days after the initial mailing to ensure receipt of the packet and to answer any questions about the study. Prompting calls were made and reminder e-mails sent, as needed, from November 2008 through July 2009.

Transcript submission. Institutions were provided the following seven options for submitting transcripts:

1. *File upload to the study website.* Institutions were asked to submit electronic transcript files, preferably in an extensible markup language (XML) or electronic data interchange (EDI) format that conformed to the Postsecondary Electronic Standards Council standard. If the transcript data were not already in one of the two preferred formats, the institution was asked to convert the files before loading, or to prepare files using the file specifications provided on the study website. The transcript files were submitted directly to the secure study website. The latest technology systems were incorporated into the transcript website application to ensure strict adherence to NCES confidentiality guidelines. The web server included an SSL encryption certificate and was configured to force encrypted data transmission over the Internet. All of the data entry modules on the site were password protected, and the user was automatically logged out of the system after 20 minutes of inactivity. Just as with all the submission methods, once the transcript files were received, they were immediately moved to a secure project folder accessible only to a subset of project staff.
2. *Submission of electronic transcripts by secure file transfer protocol (FTP) server.* Transcript files could be submitted using an FTP server, which ensures an encrypted control session. As with the file upload, it was preferable for files to be submitted using an XML or EDI format, but files could be submitted in virtually any file layout. After being copied to the secure project folder, the files were immediately deleted from the FTP server.

3. *Submission of transcripts via eSCRIP-SAFE™.* eSCRIP-SAFE™ is a third-party vendor that receives and electronically converts transcripts to PDF files, then stores them on a secure server. Institutions registered with this service send data by secure internet connection to the eSCRIP-SAFE™ server, where they can be downloaded only by a designated user. The electronic transcript files downloaded by project staff from eSCRIP-SAFE™ were saved only to the secure project folder.
4. *Submission of transcript files as encrypted attachments to e-mail.* Electronic transcript files could be emailed as attachments to the project e-mail account. Guidelines on encryption and creating strong passwords for transcript attachments were provided to the institutions. Encrypted transcript files were moved to the secure project folder and deleted from the e-mail folder immediately.
5. *Submission of transcript files through a dedicated server at the University of Texas at Austin.* A dedicated server at the University of Texas at Austin, developed to allow transcript exchange among registered institutions, was provided as an option to institutions submitting transcripts to the study. The server supported both XML and EDI formats.
6. *Submission of transcripts via secure electronic fax.* Transcripts were also accepted via secure electronic fax. To safeguard against information being misdirected or intercepted by individuals to whom access was not intended or authorized, RTI protocol only allowed for transcripts to be sent to an e-fax server housed in a secured data center at RTI. The transcript data were stored on the server as portable document files (PDFs). To ensure confidentiality, institutions were asked to send a test fax with nonsensitive data and to use a specific fax cover sheet from the project website that included a confidentiality statement. After being received and copied to the secure project folder, transcript files were deleted from the e-fax server.
7. *Submission of transcripts via FedEx.* Transcripts were also accepted via FedEx. To safeguard confidentiality, institution staff were instructed to redact any personally identifiable information from the transcript including student name, address, date of birth, and SSN (if present). Paper transcripts were kept in a locked file cabinet in RTI's secure data receipt facility, to which only a limited number of B&B:08/09 transcript staff had access. After the paper transcripts were scanned and stored electronically, they were shredded.

In addition to transcripts, other information from each institution was needed for keying and coding. Institutions were asked to provide academic calendar and grading system information on the study website. If course catalogs could not be obtained separately through institution websites or through CollegeSource Online, a resource for over 50,000 postsecondary institution catalogs, they were requested from institutions.

Transcripts and course catalogs received were inventoried, assigned unique identifiers, reviewed for any problems with legibility and completeness, and logged each day in the data receipt system. Project staff used daily monitoring reports to review problem transcripts and ICs assisted with resolving transcript problems directly with institutions.

4.1.4 Institution Website

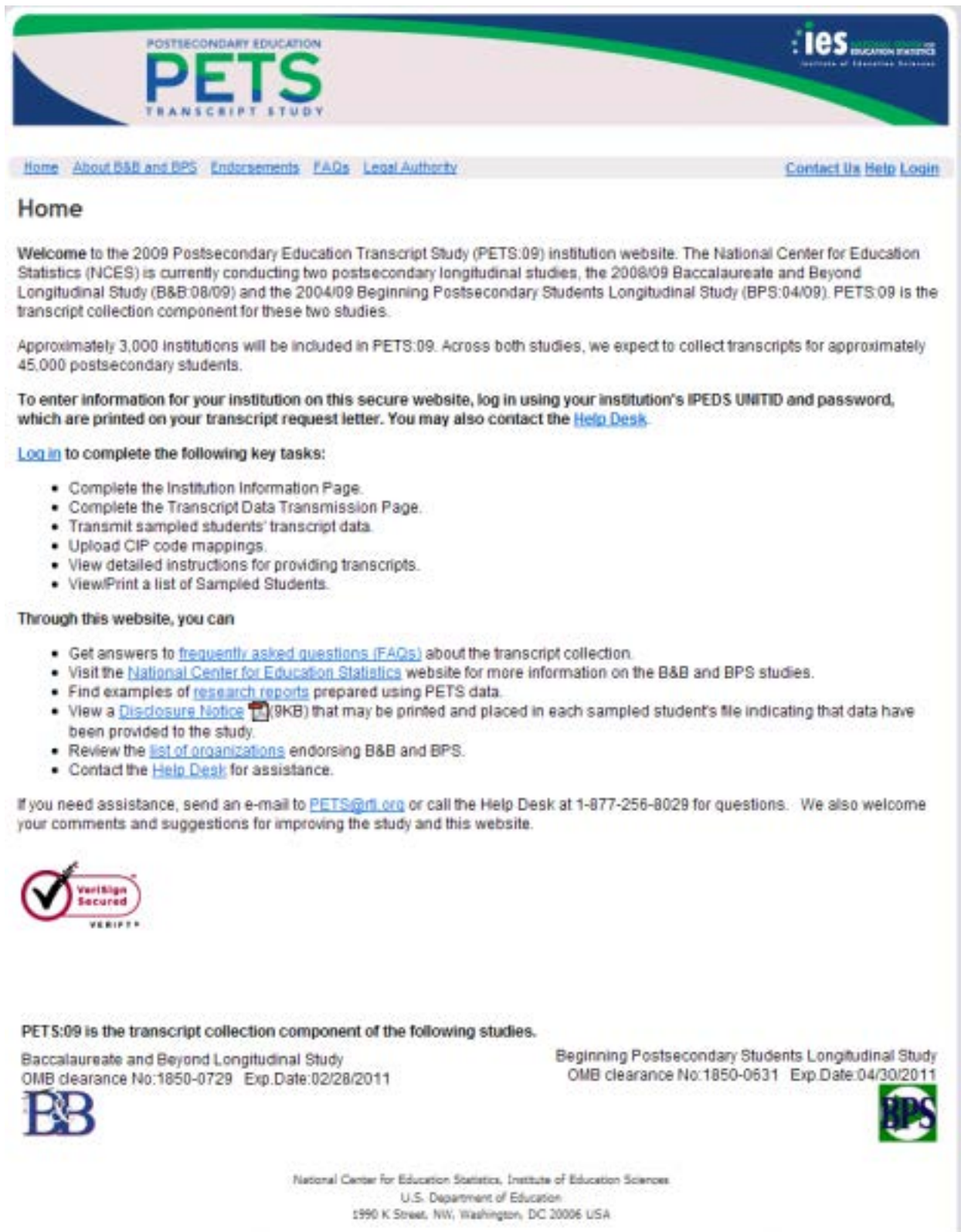
The PETS:09 website (figure 10) was the portal used to collect institution data and transcripts. The website contained information about PETS, including research topics, the transcript collection, how transcript data would be used, answers to frequently asked questions, and

confidentiality assurances. Contact information for the transcript data collection help desk and project staff at RTI, as well as links to the main NCES and RTI websites, were also included on the home page. From the secure portion of the website, institutions could view the list of their sampled students, view detailed instructions for providing transcript data, and upload data.

Various systems were incorporated into the website application to ensure strict adherence to NCES confidentiality guidelines, including the following:

- an SSL Certificate ensured secure data transmission over the Internet,
- all data entry modules were password protected,
- users were automatically logged out of the system after 20 minutes of inactivity, and
- files uploaded to the secure website were immediately moved to a secure project folder accessible only to a subset of project staff.

Figure 10. Institution website home page: 2009



POSTSECONDARY EDUCATION
PETS
TRANSCRIPT STUDY

ies NATIONAL CENTER FOR EDUCATION STATISTICS
INSTITUTE OF EDUCATION SCIENCES

[Home](#) [About B&B and BPS](#) [Endorsements](#) [FAQs](#) [Legal Authority](#) [Contact Us](#) [Help](#) [Login](#)

Home

Welcome to the 2009 Postsecondary Education Transcript Study (PETS:09) institution website. The National Center for Education Statistics (NCES) is currently conducting two postsecondary longitudinal studies, the 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09) and the 2004/09 Beginning Postsecondary Students Longitudinal Study (BPS:04/09). PETS:09 is the transcript collection component for these two studies.

Approximately 3,000 institutions will be included in PETS:09. Across both studies, we expect to collect transcripts for approximately 45,000 postsecondary students.

To enter information for your institution on this secure website, log in using your institution's IPEDS UNITID and password, which are printed on your transcript request letter. You may also contact the [Help Desk](#).


[Log in](#) to complete the following key tasks:

- Complete the Institution Information Page.
- Complete the Transcript Data Transmission Page.
- Transmit sampled students' transcript data.
- Upload CIP code mappings.
- View detailed instructions for providing transcripts.
- View/Print a list of Sampled Students.

Through this website, you can



- Get answers to [frequently asked questions \(FAQs\)](#) about the transcript collection.
- Visit the [National Center for Education Statistics](#) website for more information on the B&B and BPS studies.
- Find examples of [research reports](#) prepared using PETS data.
- View a [Disclosure Notice](#) (9KB) that may be printed and placed in each sampled student's file indicating that data have been provided to the study.
- Review the [list of organizations](#) endorsing B&B and BPS.
- Contact the [Help Desk](#) for assistance.

If you need assistance, send an e-mail to PETS@edl.org or call the Help Desk at 1-877-256-8029 for questions. We also welcome your comments and suggestions for improving the study and this website.



PETS:09 is the transcript collection component of the following studies.

Baccalaureate and Beyond Longitudinal Study OMB clearance No:1850-0729 Exp.Date:02/28/2011	Beginning Postsecondary Students Longitudinal Study OMB clearance No:1850-0631 Exp.Date:04/30/2011
-----------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------

National Center for Education Statistics, Institute of Education Sciences
U.S. Department of Education
1990 K Street, NW, Washington, DC 20006 USA

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

4.1.5 Transcript Collection Response Rates

Institution-level participation. Of 1,300 institutions in the transcript sample, 85 percent were determined to be eligible (i.e., they were confirmed as awarding bachelor's degrees during the NPSAS:08 academic year). Of these 1,100 eligible institutions, 1,020 (93 percent) provided transcripts for the sampled students. Across the institution types represented, participation in the transcript collection ranged from 79 percent at the public 2-year institutions to 95 percent at the public 4-year non-doctorate-granting institutions. (The private nonprofit 2-year or less institutions demonstrated 100 percent participation but with a very small number of institutions.) The most common reasons cited by institutions for not participating included lacking the available staff to fulfill the request for transcripts and the timing of the transcript request. Table 29 provides institution participation rates by institution type.

Table 29. Eligible institution participation, by institution type: 2009

Institution type	Eligible institutions	Participating institutions ¹	
		Number	Percent
Total	1,100	1,020	92.7
Public			
2-year	20	20	79.2
4-year non-doctorate-granting	190	180	95.1
4-year doctorate-granting	250	230	93.6
Private nonprofit			
2-year or less	#	#	100.0
4-year non-doctorate-granting	320	290	92.1
4-year doctorate-granting	200	190	94.1
Private for-profit			
2-year or more	120	110	89.3

Rounds to zero.

¹ An institution was considered a participant if it provided a transcript for at least one student.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008 National Postsecondary Student Aid Study (NPSAS:08) and 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Transcript submission method outcomes. Table 30 presents the distribution of transmission methods selected by the institutions. Providing transcripts via secure fax was the choice of the majority of the institutions: 61 percent of the institutions used the secure fax option. This was the most convenient option for most institutions that routinely generate and send out hard-copy transcripts. The next most common method was to upload transcripts via the institution website, accounting for about 20 percent of institutions. About 8 percent of institutions sent transcripts via FedEx and 6 percent sent transcripts as encrypted attachments via e-mail. The less common methods included secure FTP, used by 4 percent of institutions, and the dedicated server at the University of Texas at Austin and eSCRIP-SAFE™ which were used by 1 percent or less of institutions.

Table 30. Institution transmission mode for transcript data: 2009

Transmission mode	Institutions	
	Number	Percent
Total	1020	100.0
Electronic fax	620	61.1
Upload to study website	210	20.3
FedEx	90	8.4
E-mail	60	5.6
Secure FTP	40	3.8
eSCRIP-SAFE™	10	0.6
University of Texas server	#	0.2

Rounds to zero.

NOTE: Detail may not sum to totals because of rounding. FTP = file transfer protocol.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008 National Postsecondary Student Aid Study (NPSAS:08) and 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Student-level transcript collection. The transcript sample comprised 18,500 students. As seen in table 31, a transcript, or information indicating that a student was ineligible, was received for 17,430 (94 percent) students.

Table 31. Student-level transcript collection results: 2009

Transcript collection results	Transcript sample	
	Number	Percent
Total	18,500	100.0
Received	17,430	94.2
Did not receive	1,070	5.8

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008 National Postsecondary Student Aid Study (NPSAS:08) and 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

4.2 Transcript Keying and Coding

Keying and coding of transcripts was completed using a data entry application. Several quality control activities evaluated the various types of data collected (e.g. courses, major/field of study). This section will describe keying and coding procedures as well as outcomes.

4.2.1 Transcript Keying and Coding Procedures

Transcript keying and coding was performed by a team of specially trained data entry (keyer/coder) staff using a web-based data entry application. Work was evaluated using several quality control activities designed for various types of data collected (e.g., courses, major/field of study). The keying and coding sections (figure 11) collected the following transcript information (for a full list of keyed and coded transcript data elements, see appendix I):

- *Case information.* Preliminary transcript information including student name, address, and high school graduation date.

- *Schools and terms.* Names of the transcript school and any transfer institutions reported on the transcript, terms attended at these schools, and attempted and accepted transfer credits.
- *Academics.* Academic honors awarded (e.g., Dean’s or President’s List) and any probations, by term.
- *Tests.* Institution exams (e.g., competency and placement exams) or externally administered exams (e.g., SAT and GRE), and related scores.
- *Degrees and majors.* Degree programs attempted or earned, such as a bachelor’s or associate’s degree, degree receipt dates, and honors awarded at graduation such as *cum laude*. The specific majors or fields of study for each degree were coded in this section.
- *Courses.* Key data on courses listed on transcripts, including the terms in which the courses were taken, course numbers and names, and grades and credit or clock hours earned. In this section, each course was also coded for standardization.

Figure 11. Keying and coding system sections: 2009

Case information	Schools and terms
Student name	School name, city, state
Address	Attendance dates by term
High school graduation date	Transfer credits attempted and accepted
Academics	Tests
Honors	Exam type
Probations	Date taken
Degrees and majors	Courses
Program (e.g., BA, AA)	Course number
Degree name	Course name
Date received	Course code
Graduation honors	Course credits
Major 1, 2; Minor 1, 2; Concentration	Grade

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

To help ensure the quality of data keyed and coded, specific features were incorporated into the KCS. For example, the KCS provided links to institution course catalogs for easy reference; limited ranges and the types of characters input for fields such as dates and exam scores; and required that postsecondary institutions, majors, and courses be coded using specially designed coders.

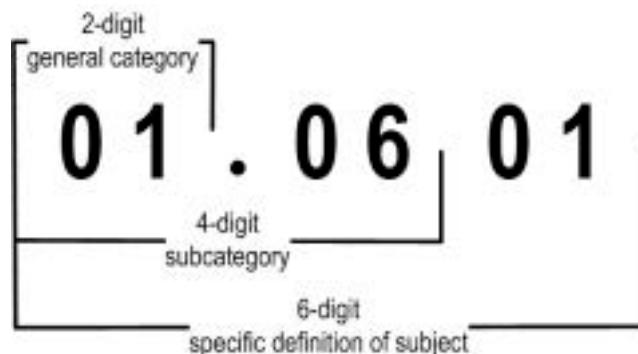
KCS coding systems. The school and major or field of study coders incorporated into the KCS were assisted coders identical to those used in the B&B:08/09 student interview instrument. The school coder used the set of institutions contained in IPEDS, developed by NCES (<http://nces.ed.gov/IPEDS/>). The major or field of study coder was based on the CIP taxonomy developed by NCES (<http://nces.ed.gov/ipeds/cipcode>). CIP codes not associated with postsecondary majors or fields of study were removed from this coder, including codes for basic

skills and developmental education, citizenship activities, health-related knowledge and skills, interpersonal and social skills, leisure and recreational activities, personal awareness and self-improvement, and high school/secondary diplomas and certificates.

The KCS course coder was similar to the KCS school and major or field of study coders, with the addition of certain search features. When a text string with the course title was entered, a keyword search based on the course title was conducted on the underlying database allowing the keyer/coder staff person to select the best option from a list of possible course options returned. If the course title did not adequately capture the description of the course in the institution catalog, keyer/coders could search the course coder database using keywords found in the course description in the institution course catalog or they could do searches by broad categories and by database codes. The KCS also included a feature for entering problem sheets for particular schools or transcripts. Problem sheets were categorized and routed to supervising staff for resolution.

Development of the KCS course coder. The underlying database for the course coder in the KCS included 2,119 course codes and code definitions. Course codes were developed by integrating selected courses from the College Course Map taxonomy (CCM) (Adelman 2004) into the 2010 CIP taxonomy from NCES. PETS codes were represented by six digits in keeping with the CIP taxonomy: the first two digits indicated the most general category; the first four digits narrowed the focus to a subcategory; and the complete 6-digit code provided the most specific definition of the subject. Figure 12 provides a visual representation of the structure of CIP codes.

Figure 12. CIP code diagram: 2009



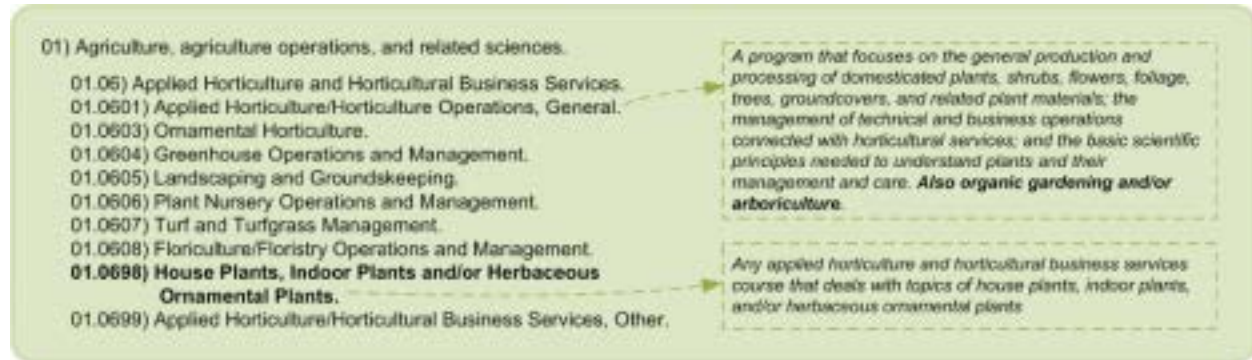
NOTE: CIP = Classification of Instructional Programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Course codes in the CCM taxonomy, which used the same 6-digit structure as the then-current CIP, were developed through extensive transcript analysis and with input from expert advisors, including postsecondary faculty familiar with the fields of study. To create a comprehensive course coder for PETS:09, content from the CCM was incorporated into the 2010 CIP in two ways: (1) course codes found in the CCM without equivalents in the CIP were added as new codes, and (2) CCM codes with equivalent CIP codes were reviewed and, when additional details or examples were found, they were added to the CIP definitions. The first method resulted in the addition of 352 unique CCM course codes to the KCS course coder. These additions were placed alongside related topics in the 2-digit category and 4-digit subcategory structure common to both the CCM and CIP taxonomies. To make these additions easily identifiable, the last two digits in their codes used a unique numbering scheme, starting with 98 and descending as needed. An example can be seen in code 01.0698 in figure 13.

The second method for integrating the CCM and the 2010 CIP resulted in adding content to the definitions of 316 CIP codes. The additional text increased the likelihood of identifying appropriate course codes using the keyword searchable KCS course coder. In instances where a CIP code was elaborated, the CCM content was placed at the end of the CIP definition. Finally, in addition to content from the CCM, 47 *general* and *other* codes were added to the KCS course coder using KCS course coder fifth and sixth digit values of “00” for *general* and “99” for *other*, when these codes were not already present in the CIP. Figure 13 illustrates a representative set of codes in the KCS course coder.

Figure 13. Course codes layout in the KCS coders: 2009



NOTE: Bold text represents content and codes added from Adelman’s College Course Map (CCM). KCS = keying and coding system.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Transcript courses were originally coded using the available draft of the 2010 CIP. The database for the course coder in the KCS was updated when the final version of the 2010 CIP was released in July 2009. Compared to the draft version, the final 2010 CIP included 80 new codes, 21 codes with different code numbers, and two codes that were deleted from the draft. For the 80 new codes in the final 2010 CIP, courses on transcripts previously coded with similar codes from the draft 2010 CIP were reviewed by keyer/coder staff to determine if they fit better into the new CIP codes. There were 17,778 courses previously coded with draft 2010 CIP codes that were updated to the final 2010 CIP codes. There were just three courses previously coded with deleted CIP codes from the draft 2010 CIP which, when reviewed, were assigned to similar, related codes in the final version of the 2010 CIP.

4.2.2 Training of Transcript Keyer/Coder Staff

Over the course of three separate 5-day trainings, beginning in January 2009, 71 keyer/coder staff were trained to use the KCS. The keyer/coder staff were supervised by five QCS who were responsible for administrative and management issues, as well as quality review of keyed and coded transcripts and keying and coding, as needed.

Each training session began with background on B&B:08/09, review of confidentiality regulations, fingerprinting, and signing of notarized affidavits. These activities were followed by an overview and discussion of the different types of transcript formats and key data elements to be located and entered into the KCS. Presentations on keying and coding fundamentals were followed by problem-solving exercises and practice sessions. The fifth day of training consisted primarily of supervised keying and coding practice using actual transcripts, followed by a practicum exam on

which all trainees were required to obtain 90 percent or better proficiency for certification. The training agenda for transcript data collection is included in appendix G.

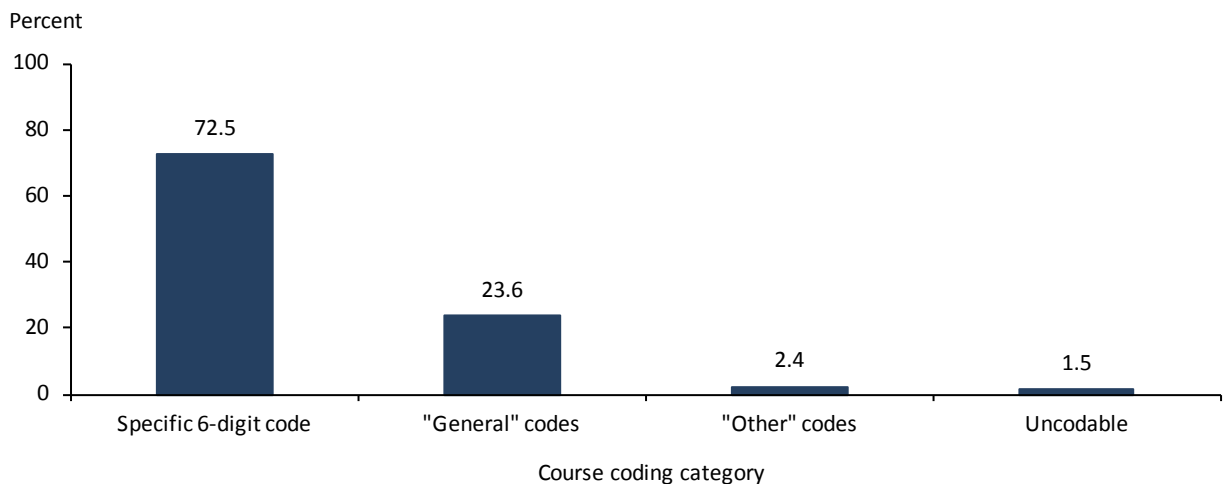
In conjunction with the above trainings and because of the wide variation in transcript layouts and information provided by the institutions, quality circle meetings were held weekly for the first 8 months of keying/coding. During the meetings, QCS and a group of keyer/coders were briefed on production and performance measures and were invited to ask questions or raise concerns. Topics discussed ranged from the use of specific CIP codes, to keying of the more problematic data elements. As the project progressed, the frequency of the quality circle meetings was adjusted to biweekly.

Often as a result of feedback during quality circle meetings, additional narrowly focused trainings were held as needed for specific topics, such as entering multiple transcripts for sample members, coding of electronic transcripts, and the use of problem sheets to record issues or questions with transcripts.

4.2.3 Transcript Keying and Coding Outcomes

Keying and coding was performed on 16,070 transcripts, with one transcript per student. These transcripts included a total of 741,450 courses, 28,090 terms, and 17,180 degrees. Of the 741,450 courses coded, 73 percent were coded with a specific *6-digit* code. *General* codes were selected for 24 percent of the courses coded and were typically chosen for the many introductory level courses, while *other* codes were selected for 2 percent of the courses when no more specific code matches in the KCS course coder were found for a course on a transcript. *Uncodeable* courses accounted for 2 percent of all courses, often due to unclear course titles or inadequate information on course content. The results of course coding are shown in figure 14.

Figure 14. Course coding results: 2009



SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

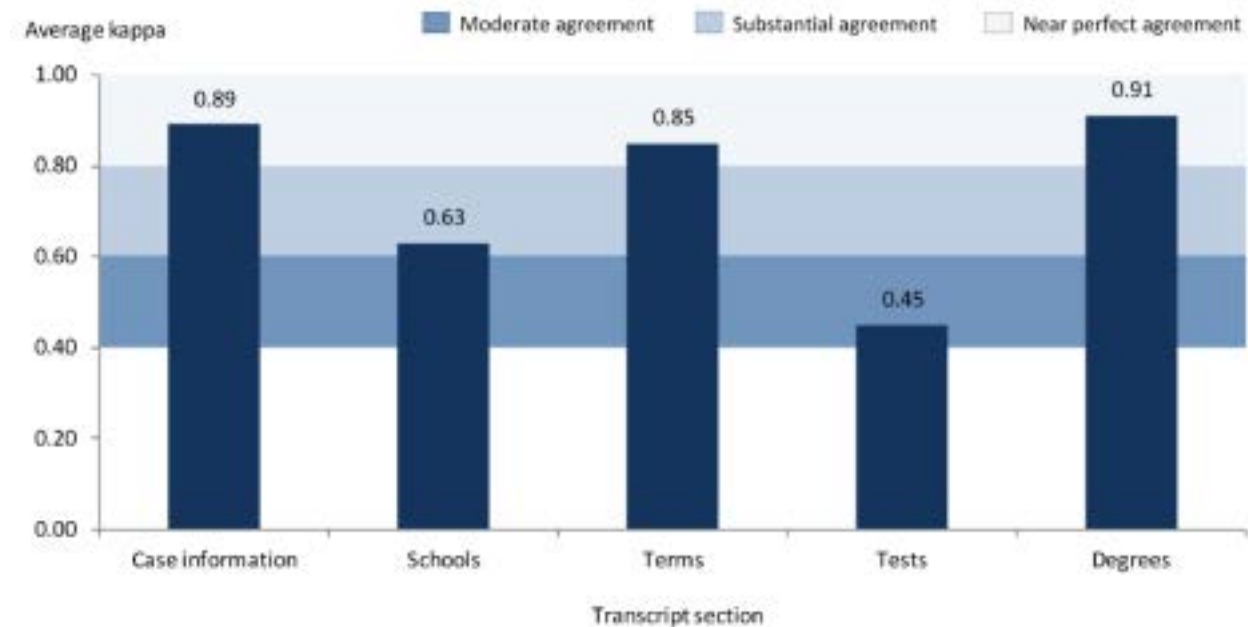
4.2.4 Evaluation of Transcript Keying and Coding

Multiple evaluation steps were taken to ensure the quality of transcript data entered into the KCS. These activities included rekeying a sample of data elements, expert coding a sample of course

and major/field of study coding, and upcoding of text strings for institutions or other transcript data elements that could not be coded initially.

Rekeying. To evaluate the reliability of transcript data keyed into the KCS, approximately 10 percent (1,600) of the transcripts were randomly selected to be rekeyed. A subset of transcript data elements were rekeyed by quality control supervisors, which took approximately 10 to 15 minutes per transcript, depending on the number of the selected data elements found on the transcript (e.g., the number of terms attended). Figure 15 shows agreement rates for the rekeying activity, organized by keying and coding section. For both rekeying and recoding activities, the Cohen’s kappa statistic was used to assess inter-rater reliability between the original coder and quality control supervisors, or expert coders. Cohen’s kappa measures the proportion of agreement between raters, above what would be expected by chance. Landis and Koch (1977) proposed that kappa scores of 0.81-1.00 be considered “near-perfect agreement,” 0.61-0.80 “substantial agreement,” and 0.41-0.60 “moderate agreement.”²² All of the rekeyed items have at least moderate agreement, with case information, terms, and degrees all within the range of near perfect agreement.

Figure 15. Rekey kappa values by transcript section: 2009



SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Data collected in the test section of the KCS (exam name, date taken, and score), however, had a noticeably lower value for kappa (0.45) than other data elements. Further investigation into test data on transcripts revealed that of the 1,020 institutions that provided transcripts, only 28 schools included Advanced Placement (AP) tests with scores on their transcripts. Instead, tests, particularly exams for which course credit was awarded, were often included on transcripts in a format more similar to courses (e.g., “AP biology, 3.0 credits”). Due to the low interrater reliability

²² Although Landis and Koch’s classification scheme is commonly used as a benchmark for kappa scores, there is debate regarding its utility and the appropriateness of kappa classification schemes, in general. See Gwet (2010), Sim and Wright (2005) and Fleiss (1981) for detailed discussions of criticisms and alternative classifications.

score and frequency with which test data were found on transcripts, this category of data were determined to be unreliable and will not be included in B&B data file because its presence on postsecondary transcripts was determined to be unreliable.

Expert coding. Expert coding was performed on 71,820 courses, both to evaluate the reliability of coded data and to create feedback opportunities to improve data quality. Expert coding used more experienced (expert) staff, all of whom held at least a bachelor's degree and who also performed coding in the field test study, to recode a subsample of coded courses and to provide feedback to keyer/coders on course code selection. Expert coding was performed from the beginning of the keying and coding process and continued until its conclusion so that keyer/coder staff could receive feedback on their performance and additional training needs could be addressed promptly.

Initially, the expert coding process included two steps. In expert coding 1 (EC1), expert coder staff reviewed course information and selected a code, which was then compared to the keyer/coder's choice. In cases where the keyer/coder and expert coder selections did not match, expert coding 2 (EC2) was performed to assess the reliability of EC1. EC2, in addition to being performed on all cases where EC1 and keyer/coder choices did not match, was also performed on a 15 percent random sample of codes where the EC1 and keyer/coder agreed.

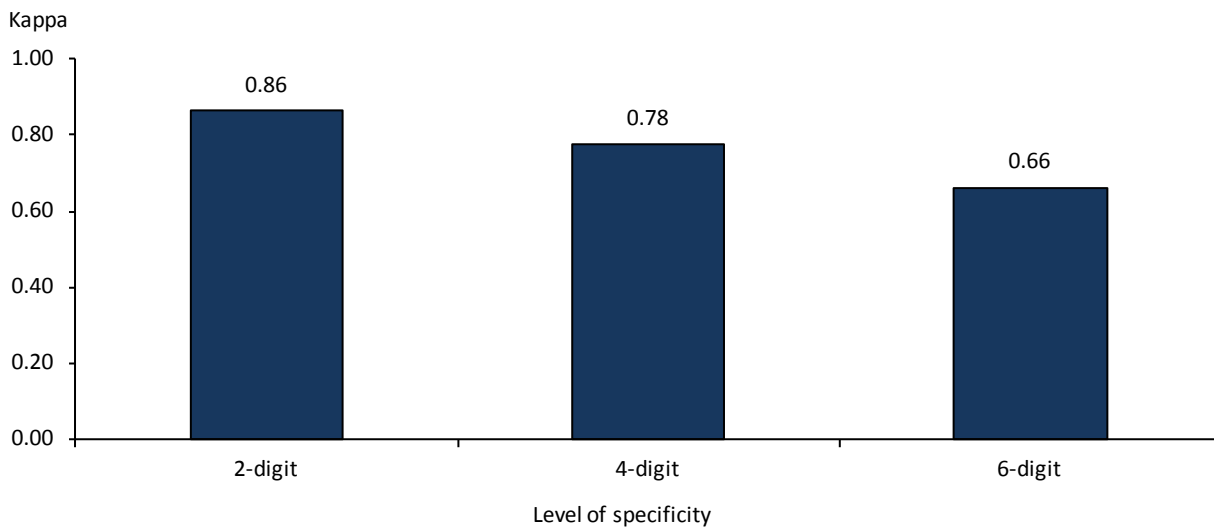
EC2 was performed as a review of the quality of the EC1 staff and included review of course information and deciding upon the EC1 choice, the keyer/coder choice, or an entirely different code— to avoid potential bias, the EC2 could not identify which selection was made by the EC1 or keyer/coder. EC2 review of keyer/coder EC1 disagreements added reliability to the EC1 code selections upon which keyer/coder feedback was developed. EC2 was performed by the same project staff responsible for keyer/coder training and course code development.

Based upon a sample of 3,350 disagreements between keyer/coder and EC1, EC2 agreed with EC1 in 60 percent of the cases, with the keyer/coder in 32 percent of the cases, and selected a different code (neither the EC1 nor the keyer/coder's choice) in 9 percent of the cases. The EC2 staff agreed with expert coder choices significantly more than the keyer/coder choices: $\chi^2(1, N = 3,350) = 308.22, p < 0.01$.

As with keying and coding, expert coding was performed in batches by school. Courses were not expert coded until all of a school's transcripts had been keyed and coded. For both EC1 and EC2, expert coders reviewed course number and name and had access to course catalogs to make coding decisions.

For the purpose of reviewing keyer/coder work and providing feedback, expert coding was performed on both random and cluster samples of courses. EC1 was performed on a random 10 percent sample of all courses from each school. For schools with fewer than 10 total courses, all courses were expert coded. Cluster sampling was used to select courses coded with *other* codes (e.g., 26.0299, biochemistry, biophysics and molecular biology, other). Courses coded as *needs review* or *uncodeable* were also reviewed in expert coding.

Interrater reliability for course coding was assessed using 5,000 courses randomly selected for calculating agreement statistics. The kappa statistic was used to assess interrater reliability between the original coder and expert coders. Expert coding results are shown in figure 16. Agreement rates are shown at three levels of specificity: 2-digit, 4-digit, and 6-digit. At the 2-digit level, the kappa statistic indicates near-perfect agreement between keyer/coder and expert coder. At both the 4- and 6-digit levels, the kappa statistic indicates substantial agreement.

Figure 16. Expert coding results, kappa by level of specificity: 2009

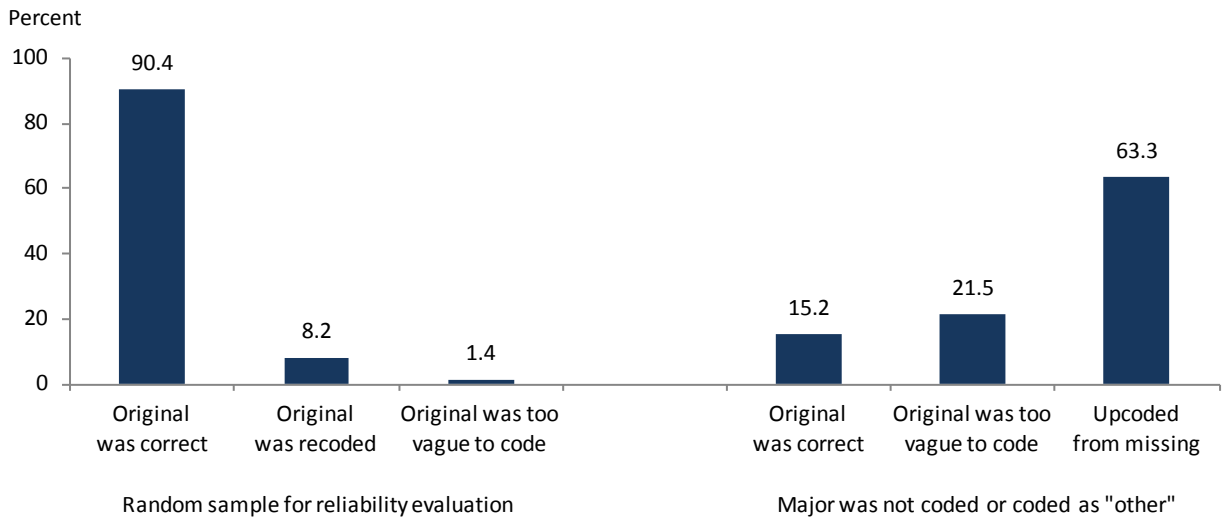
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Review of “other” course codes. For the first six months of keying, courses coded using the “other” category in the PETS:09 coder were reviewed by expert coders with the goal of minimizing the use of the category. Keyer/coder training emphasized that “other” codes should be reserved for courses that fit within a 4-digit subject area but for which more specific 6-digit codes in that series were not appropriate. “Other” was not intended for coding problematic courses or those for which additional analysis would result in a more accurate code. Expert coders provided direct feedback to keyer/coders on cases for which there were more appropriate coding choices.

In addition to the expert coding performed, “other” codes were also reviewed to determine if additional codes should be added to the PETS coder. The PETS course taxonomy included 231 courses with an “other” designation, such as 31.0599, “Health and Physical Education/Fitness, Other,” or 23.9999, “English Language and Literature/Letters, Other.” A review of the courses coded as “other” was undertaken to determine if there were common subjects within the codes that would merit introduction of new codes. The median number of uses of “other” for all course codes was 132. This median was used as the threshold for adding a new code: if 132 instances of the same subject could be identified within the courses coded using the “other” code, a new code would be added. However, a review of “other” codes did not identify any subjects that met this threshold, so no new codes were added.

Upcoding and reliability recoding for major/field of study. Text strings for 158 entries for field of study that were not coded by keyer/coders were later reviewed by project staff to determine if an appropriate code could be identified. In addition to this upcoding activity, a random sample of 2,745 coded majors was also included in this process as a key-rekey step to evaluate the reliability of the field of study data. The results are shown in figure 17. For the randomly selected cases, the coder and recoder agreed in 90 percent of the cases. For the uncoded majors, project staff was able to identify a major code in 63 percent of the cases. In 22 percent of the uncoded cases, data on the transcripts were too vague to identify an appropriate code and, in 15 percent of cases, the original code selection was correct.

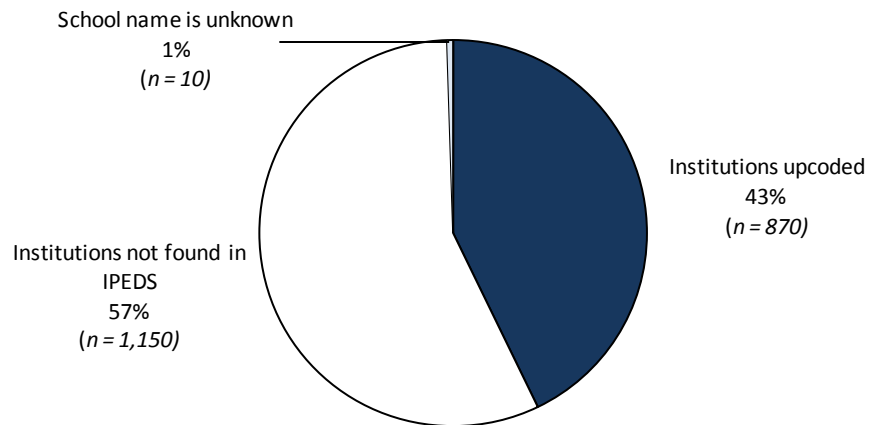
Figure 17. Major/field of study upcoding: 2009



SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Upcoding for institutions and variables with “other, specify” options. Uncoded text strings for institutions were reviewed by project staff to determine if an appropriate code could be identified. This task was performed on 2,020 cases by staff with greater familiarity with postsecondary institutions and with additional resources for researching school names and locations. The results of this institution upcoding are shown in figure 18. In 57 percent of the cases, the institution could not be identified in IPEDS, and thus remained uncodeable. Analysts were able to code 43 percent of the previously uncodeable institutions while for less than 1 percent of cases, the school name could not be identified at all.

Figure 18. Institution IPEDS upcoding: 2009



NOTE: Detail may not sum to totals because of rounding. IPEDS = Integrated Postsecondary Education Data System.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

In addition to institutions, transcript data elements with “other, specify” options included:

- noncourse credits awarded (e.g., course credit for Advanced Placement tests),
- tests (e.g., SAT),
- term honors (e.g., Dean’s List),
- term probations (e.g., academic probation),
- degree programs (e.g., associate’s),
- grades (e.g., R),
- bachelor’s degree types (e.g., Bachelor of Education), and
- degree honors (e.g., with distinction).

All items coded as “other, specify” were reviewed by analysts to determine if the text strings could fit into existing choices or if there were common strings that merited addition of a new choice. For example, Bachelor of Education was not included in a drop-down menu for bachelor type, therefore it was entered as a text string under “Other, specify.” When the value appeared repeatedly as a text string, it was assigned as a category and upcoded accordingly. Table 32 shows the results of “other, specify” upcoding. The total number of cases is shown for each data element along with the number and percent that were upcoded.

Table 32. Upcoding of “other, specify” data: 2009

Data elements with “other, specify” option	Number of “other, specify” cases	Number upcoded	Percent upcoded
Noncourse credits awarded	6,870	5,720	83.3
Tests	2,440	1,080	44.2
Term honors	31,640	21,730	68.7
Term probations	8,350	3,420	40.9
Degree programs	10	10	50.0
Grades	52,860	35,750	67.6
Bachelor's degree types	840	640	75.3
Degree honors	320	230	73.4

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond (B&B:08/09)

Keyer/Coder Staff Debriefing. Near the conclusion of keying and coding, a debriefing focus group was held with seven keyer/coders who had collectively keyed and coded more than 10,000 transcripts. Two participants had also performed duties as QCS. Focus group participants agreed that the keyer/coder training had been helpful and prepared them for the task. They also found quality circle notes and meetings to be useful. The keying and coding system facilitated entry of transcript data, although some data elements in the system were not commonly found on transcripts, such as “transfer credits for grade point average” and “state basic skills tests.”

Regarding course coding, focus group participants found the search features of the KCS to be useful, but certain course subjects were difficult to code, such as engineering and computer courses, as well as some education courses, when it was difficult to discern whether the course was

about learning the topic itself or learning about how to teach the topic. Finally, focus group participants indicated that identifying remedial courses was sometimes difficult, for instance when the course description sounded like it could be remedial but without stating so explicitly. In such cases, keyer/coders were sometimes able to confirm a course was remedial by noting a grade greater than an F with no credits awarded.

4.2.5 Timing of Transcript Keying and Coding

Transcript keying and coding was conducted from January 19, 2009, to June 11, 2010. On average each transcript took 88 minutes to key and code. The time to complete keying and coding varied by institution sector, ranging from a 75 minute average for transcripts from private, for-profit 2 years or more institutions, to 98 minutes for transcripts from private, nonprofit, 4-year non-doctorate granting institutions (table 33).

Table 33. Average minutes per transcript, by institution type: 2009

Institution type	Number of transcripts	Average minutes/transcript
Total	7,250	88.03
Public		
2-year ¹		
4-year non-doctorate-granting	1,000	83.46
4-year doctorate-granting	3,200	86.13
Private nonprofit		
2-year or less		
4-year non-doctorate-granting	1,250	98.42
4-year doctorate-granting	1,450	89.51
Private for-profit		
2-year or more ¹	350	75.25

¹ Institution offered a 4-year degree during the sample member's enrollment.

NOTE: Only transcripts completed in less than 4 hours were used in calculation of average minutes/transcript. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond (B&B:08/09).

4.3 Transcript Data Collection Conclusions

A transcript collection was conducted for B&B:08/09 as part of PETS:09. Institution contacting staff were trained to facilitate the data collection process, using a transcript control system to aid institution representatives in the submission of transcripts. A PETS:09 website was also developed to aid institutions in the submission of transcripts, providing instructions for several secure electronic transmission methods, fax, and FedEx. Data receipt staff completed initial processing and quality review of the transcript data and institution contacting staff communicated with staff at postsecondary institutions to resolve any missing data or problems.

Transcript keying and coding was performed using a specially designed keying and coding system that was divided into sections for the entry of data for case information, schools and terms, academics, tests, degrees and majors, and courses. A postdata collection debriefing of keyer/coder staff indicated the system was effective for transcript data entry. The PETS coder, created by

merging 2010 CIP and 2003 CCM, provided a detailed code taxonomy for the coding of courses by subject.

The 5-day keyer/coder training and ongoing feedback offered through quality circle meetings prepared staff to reliably perform keying and coding tasks. All staff passed the proficiency test at the conclusion of training, and the results of the keying and course coding interrater reliability assessments indicate substantial agreement between keyer/coders and expert coders. Recoding of the random sample of major/field of study data further supported the reliability of the data.

Upcoding was performed on all uncoded institutions and additional data elements where “other, specify” options were available, such as noncourse credit awarded, tests, honors, probations, and degree programs. Upcoding added greater detail to data collected. Courses coded with “other” codes were reviewed for common subjects, but none were found in great enough numbers to add new course codes.

Chapter 5.

Postdata Collection Data File Processing Activities

The data files for B&B:08/09 contain student-level data collected from administrative databases, student interviews, and transcripts. These data are available to users in two ways. A set of restricted research files, fully documented, are available to restricted data licensees on a CD from NCES. Tables and regression analyses can be run by any user through the NCES online application PowerStats, which also contains variable documentation. PowerStats is available online via the DataLab site at <http://nces.ed.gov/datalab/index.aspx>. This chapter describes each file and details the editing and documentation processes applied to each.

5.1 Administrative Record Matching

In addition to the student interview, data collection for B&B:08/09 included record matching to the CPS, the National Student Loan Data System (NSLDS), and the NSC StudentTracker database. This section provides a discussion of the observed match rates for these three databases.

5.1.1 Central Processing System

The CPS contains data provided to the U.S. Department of Education by students and their families when they complete the Free Application for Federal Student Aid (FAFSA). Successful record matching to CPS can occur only for sample members who were federal student financial aid applicants for the years requested. Matching for B&B:08/09 was to CPS data for the 2008–09 and 2009–10 financial aid years, using a sample member’s SSN concatenated with the first two letters of the last name as the *CPS ID*. The percentage of sample members who matched to CPS for the 2008–09 academic year was about 24 percent. For 2009–10, the rate was approximately 23 percent. As expected, 2009–10 match rates were lower than those for 2008–09 because fewer members of the B&B:08 cohort continued to be enrolled in postsecondary education and to apply for federal aid. Table 34 shows the CPS matching results.

Table 34. Central Processing System matching results, by academic year: 2008–10

CPS matching results	Academic year			
	2008–09		2009–10	
	Number	Percent	Number	Percent
Total	18,500	100.0	18,500	100.0
Matched	4,400	23.8	4,150	22.4
Did not match	14,100	76.2	14,340	77.5

NOTE: Detail may not sum to totals because of rounding. CPS = Central Processing System.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond (B&B:08/09).

5.1.2 National Student Loan Data System

NSLDS matching was performed by the NSLDS contractor at the request of the U.S. Department of Education, using names, SSNs and dates of birth provided by RTI. Successful matching to NSLDS could occur only for sample members who were awarded federal loans, Pell Grants, TEACH Grants, SMART Grants, or ACGs. NSLDS files are historical, so information about a student's receipt of such loans and grants was available not only for the current academic year but also for any applicable prior years. Consequently, historical match rates reported for the B&B:08/09 sample members do not necessarily reflect only the 2009–10 academic year. The federal loan match rate was about 75 percent and the match rate for Pell Grants was about 52 percent. The number of sample members matching to the data system for ACGs or SMART Grants was about 19 percent, while the match rate for TEACH Grants was less than 1 percent. This is not surprising, given that less than 15 percent of our respondents reported in the interview that they were currently teaching or had taught since graduating. Table 35 summarizes the match rates observed for the B&B:08/09 sample members.

Table 35. National Student Loan Data System matching results, by loan and grant type: 2009

NSLDS matching results	Federal loan		Pell Grant		ACG or SMART		TEACH	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	18,500	100.0	18,500	100.0	18,500	100.0	18,500	100.0
Matched	13,800	74.6	9,550	51.6	3,440	18.6	30	0.2
Did not match	4,690	25.4	8,950	48.4	15,060	81.4	18,470	99.9

NOTE: Detail may not sum to totals because of rounding. ACG = Academic Competitiveness Grant. NSLDS = National Student Loan Data System. SMART = Science and Mathematics Access to Retain Talent. TEACH = Teacher Education Assistance for College and Higher Education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond (B&B:08/09).

5.1.3 National Student Clearinghouse

In addition to the CPS and NSLDS file matching, the B&B:08/09 sample was matched to the NSC StudentTracker database, which provides information on postsecondary enrollment, degree, and certificate records on behalf of participating postsecondary institutions. In order to perform the match, RTI supplied SSNs, names, and dates of birth for sample members to the NSC. Overall, a record match for a student's enrollment at any NSC-participating institution was obtained for about 94 percent of the B&B:08/09 sample. Match results in table 36 are based on enrollment and degree records from all participating institutions for the 2002–03 academic year through the 2008–09 academic year.

Table 36. National Student Clearinghouse StudentTracker matching results: 2009

Matching to the NSC	Number	Percent
Total	18,500	100.0
Matched	17,450	94.4
Did not match	1,050	5.6

NOTE: Detail may not sum to totals because of rounding. NSC = National Student Clearinghouse.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond (B&B:08/09).

5.2 B&B:08/09 Main Study Data Files

The primary analysis file, from which PowerStats was constructed, contains data for 15,050 respondents. The first data release was adjudicated and approved for public release July 20, 2011. The primary analysis file contains over 400 variables, developed from multiple sources. Throughout the data collection period, data were processed and examined for QC purposes. Editing of student data began shortly after the start of web data collection, when procedures and programs for this purpose were first developed. Anomalous values were investigated and resolved, where appropriate, through the use of data corrections and logical recodes. Interim files were delivered to the NCES for review throughout the data collection period.

The restricted-use CD for B&B:08/09 contains the following files, each of which can be linked by the student's study ID:²³

- *B&B:08/09 analysis file*. Contains analytic variables derived from all B&B data sources and selected direct student interview variables available as of the initial release of B&B:08/09 PowerStats.
- *B&B:08/09 student data file*. Contains student interview data collected from 15,050 respondents. Topics include eligibility, undergraduate and graduate education, employment, teaching and background.
- *B&B:08/09 undergraduate institution data file*. Contains undergraduate institution and degree data obtained from the B&B:08/09 student interview for all respondents. It is a student-level file; however, a student can have more than one record in the file. There is a separate record for each degree obtained from each postsecondary institution that the student attended between the time they graduated from high school and the time they graduated with their bachelor's degree (the maximum number of reported institutions for any one respondent was seven).
- *B&B:08/09 graduate institution data file*. Contains postbaccalaureate institution and degree data obtained from the B&B:08/09 student interview for all respondents. It is a student-level file; however, a student can have more than one record in the file. There is a separate record for each degree obtained from each postsecondary institution that the student attended since earning their bachelor's degree.
- *B&B:08/09 coding data file*. Contains major/field of study, industry, and occupation strings collected in the B&B student interview and the associated codes.
- *CPS data files*. Contains data received from the CPS for the eligible sample members who matched to the financial aid application files.
2007–08: file contains about 10,490 respondents matched
2008–09: file contains about 4,400 respondents matched
2009–10: file contains about 4,150 respondents matched
- *NSLDS loan data file*. Contains raw loan-level data received from the NSLDS for the 13,800 respondents who were awarded loans through 2009–10. This is a history file with separate records for each transaction in the loan files; therefore, there can be multiple records per case spanning several academic years.

²³ The restricted files are available to researchers who have applied for and received authorization from NCES to access the restricted ECB. Researchers may obtain authorization by contacting the NCES Data Security Office.

- *Pell data file.* Contains raw grant-level data received from the NSLDS for the 9,550 respondents who were awarded Pell grants through 2009–10. This is a history file with separate records for each transaction in the Pell system; therefore, there can be multiple records per case.
- *ACG/SMART data file.* Contains raw grant-level data received from the NSLDS for the 3,440 respondents who were awarded ACGs or SMART Grants through 2009–10. This is a history file with separate records for each transaction in the database; therefore, there can be multiple records per case.
- *Teacher data file.* Contains raw grant-level data received from the NSLDS for the 30 respondents who were awarded TEACH Grants through 2009–10. This is a history file with separate records for each transaction in the database; therefore, there can be multiple records per case.
- *ACT data file.* Contains data received from ACT for the 5,390 respondents who matched to the 2001–02 through 2006–07 ACT files.
- *CCD data file.* The CCD file contains the most recent Common Core of Data records (from the 2008–09 academic year) for schools whose NCES ID's were reported by B&B:08/09 respondents as schools in which they worked.
- *PSS data file.* The PSS file contains the most recent Private School Survey records (from the 2007–08 academic year) for schools whose NCES ID's were reported by B&B:08/09 respondents as schools in which they worked.
- *NPSAS:08 file.* Contains the base-year data included in the NPSAS:08 ECB.
- *B&B:08/09 weights file.* Contains all of the analysis weights created for B&B:08/09, including transcripts. There is a separate record for each study respondent.²⁴

5.3 Transcript Data Files

The data files for the B&B:08/09 transcript component contain the data included on each transcript that was entered via the KCS, as well as approximately 315 composite variables derived from that data. Many of the student-level derived variables are available through PowerStats.²⁵ The following files, which contain records for the 16,070 transcript component respondents, were produced for the restricted CD:

- *Transcript analysis file.* Contains student-level analytic variables derived from transcript data, and selected direct transcript variables.
- *Institution data file.* Contains institution-level data obtained from the student transcripts with a record for each sampled NPSAS institution that sent transcripts and also for transfer institutions noted on those transcripts. This is a file of institutions only; it does not contain a student ID or transcript ID. Each record includes institution control, level, location, credit/clock hour uses, calendar system, grading system, and units required to

²⁴ See Chapter 6 for a full description of the B&B:08/09 study weights.

²⁵ A set of restricted research files fully documented through an ECB are available to restricted data licensees from the National Center for Education Statistics (NCES). Tables and regression analyses can be run by any user through NCES's online application PowerStats, which also contains variable documentation. PowerStats is available online via the DataLab site at <http://nces.ed.gov/datalab/index.aspx>.

- be designated full-time. This file also contains some institution-level derived variables such as institution selectivity and the percentage of faculty members who are full-time.
- *Student schools data file.* Contains a record pertaining to a single pairing of student and school. There could be multiple records per student if a student's NPSAS institution transcript listed credits that were granted by another institution and transferred to the NPSAS institution. Each record contains student ID, school IPEDS ID, date student first attended institution, transfer credits attempted/accepted at institution, and transfer credits for grade point average. Records pertaining to the NPSAS institution also contain cumulative transcript totals and high school graduation date. This file also contains some student/school derived variables such as the proportion of terms enrolled full time and the ratio of credits earned to credit required for degree.
 - *Degree data file.* Contains degree-level data with a record for each degree obtained or attempted at any institution, as listed on the NPSAS institution's transcript. Each record includes degree and program data such as type of degree, degree date, and degree honors received. It also includes majors, minors, concentrations and their respective 2010 CIP codes. This file also contains some degree-level derived variables such as condensed field of study categories.
 - *Courses data file.* Contains course-level data with a record for each course taken that was included on the NPSAS institution's transcript as well as transfer courses listed on the transcript. Each record includes course name, course number, grade, credits earned, quality points, Postsecondary Education Transcript Study course code, and course attributes. This file also contains course-level derived variables that normalize other variables. The normalization process allows for all values of the variable in question to be placed on the same scale so that they are comparable across students and institutions. This file contains normalized variables for grade, potential credit, earned credit, and quality points.
 - *Terms data file.* Contains a record pertaining to a single pairing of student and term for all institutions. Each record contains the IPEDS ID of the institution, transcript ID, term name, start and end dates, and honors/probation indicators. This file also contains some term-level derived variables such as total earned credits, term grade point average, and enrollment status.

5.4 Data Editing

The B&B:08/09 data, including data from the transcript component, were edited using procedures developed and implemented for previous studies sponsored by NCES, including the base-year study, NPSAS:08. Following data collection, the information collected in the student instrument and in transcripts was subjected to various QC checks and examinations. For example, in the student interview these checks were conducted to confirm that the collected data reflected appropriate item routing (*skip patterns*). Another evaluation involved examination of all variables with missing data and substitution of specific values to indicate the reason for the missing data. For example, in the student interview data, an item may not have been applicable to particular students, a respondent may not have known the answer to the question, or a respondent may have skipped the item entirely (table 37).

Table 37. Description of missing data codes: 2009

Missing data code	Description
-1	Don't know
-3	Not applicable
-6	Value out of range
-8	Item was not reached due to an error
-9	Data missing ¹

¹ Includes items not administered in the abbreviated interview.

SOURCE: U.S. Department of Education, National Center for Education Statistics. 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Skip-pattern relationships in the interview database were examined by methodically cross-tabulating gate items and their associated nested items. In many instances, gate-nest relationships spanned multiple levels within the interview: Items nested within a gate question may themselves have been gate items for additional items. Consequently, validating the gate-nest relationships often required several iterations and many multi-way cross-tabulations to ensure the proper data were captured. Gate-nest relationships were also preserved and edited appropriately in the transcript data files; however, fewer of these relationships exist in those data.

The data cleaning and editing process for the B&B:08/09 data files involved a multistage process that consisted of the following:

1. Blank or missing data were replaced with -9 for all variables in the interview and transcript databases. A one-way frequency distribution of every variable was reviewed to confirm that no missing or blank values remained. These same one-way frequencies revealed any out-of-range, or *outlier*, values, which were replaced with a -6 value (e.g., hourly wages of \$0.10, rather than \$10.00). Creating SAS formats from expected values and the associated value labels also revealed any categorical outliers. Descriptive statistics were produced for all continuous variables. All values that were less than zero were temporarily recoded to *missing*, and the minimum, median, maximum, and mean values were examined to assess reasonableness of responses; anomalous data patterns were investigated and corrected, as necessary. For transcripts, missing data were also replaced with a -9 (e.g., if high school graduation date did not appear on the transcript) and one-way frequencies were reviewed for any *outlier* values and also given a -6 value (e.g., credit hours of 100 per course, rather than 3).
2. Legitimate skips were identified through the use of interview source code and flowcharts. Gate-nest relationships were defined to replace -9s (*data missing, reason unknown*) with -3s (*not applicable*), as appropriate. Two-way cross-tabulations between each gate-nest combination were evaluated; high numbers of nonreplaced -9 codes were investigated to ensure skip-pattern integrity. Nested values were further checked to reveal instances in which the legitimate skip code overwrote valid data, which typically occurred if a respondent answered a gate question and the appropriate nested items but then reverted to change the value of the gate to one that opened on an alternate path of nested items. Because responses to the first nested items remained in the database, they required editing. For transcripts, gate-nest relationships were limited; however, -3 values were set for inapplicable items.

For example, if a transcript indicated that the student was still working on the degree, then a -3 value was given to the *degree date* variable.

- Variables were formatted (e.g., dates were formatted as YYYYMM), and time units were standardized for items that collected amounts of time in multiple units. In addition, any new codes assigned by expert coders reviewing IPEDS, elementary and secondary school, industry, occupation, and major codes from the interview (including those strings that could not be coded during the interview) were merged back with the interview data files. Similarly, any new codes assigned by the expert coder reviewing the IPEDS, major, minor, concentration and other specify strings from the transcript data were merged back with the transcript data files. Also at this stage, logical recodes were performed when the value of missing items could be determined from answers to previous questions or preloaded values. For example, if a student was not currently repaying education loans, then the monthly payment amount was recoded to \$0. For transcripts, missing IPEDS, major, and course codes were reviewed by expert coders.

Concurrently with data cleaning, documentation was developed for both interview and transcript data to detail question text, response options, logical recoding, and the “applies to” text for each delivered variable (for documentation information, see the student interview facsimile in appendix D).

5.5 Data Perturbation

To protect the confidentiality of NCES data that contain information about specific individuals and to minimize disclosure risks, B&B:08/09 data were subject to perturbation procedures. Perturbation procedures, which have been approved by the NCES Disclosure Review Board, preserve the central tendency estimates but may result in slight increases in nonsampling errors.

All respondents were given a positive probability of being selected for swapping. Perturbation was carried out under specific targeted, but undisclosed, swap rates. In data swapping, the values of the variables being swapped are exchanged between carefully selected pairs of records: a target record and a donor record. Swapping variables were selected from all questionnaire items.

Because perturbation of the B&B:08/09 data could have changed the relationships between data items, an extensive data quality check was carried out to assess and limit the impact of swapping on these relationships. For example, a set of correlations for a variety of variables was evaluated pre- and posttreatment to verify that the swapping did not greatly affect the associations.

5.6 Statistical Imputations

All variables from the student interview data and the derived variables in PowerStats with missing data were imputed. Imputed data are available in both PowerStats and the restricted derived data file. Derived variables obtained from student transcript data and the variables included in the remaining restricted files were not imputed. The variables were split into six batches to facilitate and expedite imputation, and a consistent imputation methodology was employed for each batch. Some

of the B&B respondents had missing NPSAS data,²⁶ so these NPSAS variables were imputed first. These NPSAS variables were then used as part of the imputation process for the B&B variables.

The general imputation methodology consisted of three steps. The first step, if applicable, was logical or deterministic imputation. That is, if the imputed value could be deduced from the logical relationships with other variables, then that information was used to deterministically impute the value for the recipient. The next step was the use of a tree-based methodology, or in a few cases a response propensity model, to create imputation classes. The final step used hot deck²⁷ imputation to stochastically impute missing values from donors within the identified imputation classes.

Variables requiring imputation were imputed sequentially. However, some variables that were related substantively or had similar levels of missing response were grouped together into blocks, and the variables within a block were imputed simultaneously. The order in which variables, or blocks of variables, were imputed was primarily based on the level of missing data. The variables with lower levels of missing data were imputed before the variables with higher levels of missing data. When a variable was selected for imputation based on its level of missing data, three specific pieces of information were evaluated. First, logical consistency was checked to make sure that any known relationships were maintained throughout the imputation process. Second, the pattern of missing data were evaluated to determine whether other variables should be included to create a block of variables requiring imputation. Finally, the imputation class variables and sorting variables were identified.

All stochastic imputations used a tree-based methodology to create imputation classes and the weighted sequential hot-deck (WSHD) methodology (Cox 1980; Iannacchione 1982) within imputation classes to replace missing values. The imputation classes were formed using nonparametric classification trees (Breiman et al. 1984). The nonparametric classification trees formed imputation classes from a prediction model based on the observations with valid values for the variable requiring imputation. The nonparametric classification tree recursively split the cases into homogenous groups, which were used to define the imputation classes. The observations with missing values for the variable to be imputed were assigned their imputation class based on the same variables used in the tree splits.

The WSHD methodology replaced missing data with valid data from a donor record within an imputation class. The WSHD methodology also incorporated sorting within imputation class for additional control and uses the sample weight of each record in the donor selection process. The imputation classes in the application of the WSHD methodology were formed by identifying variables related to the variable requiring imputation. Data were sorted within each imputation class to increase the chance of obtaining a close match between donor and recipient. Within each imputation class, the hot-deck process searched for donors sequentially, starting with the recipient and progressing up and down the sorted file to find the set of eligible donors from which a random selection of a donor was made. The process was weighted since it incorporated the sample weight of each record in the search and selection routine, using the methodology described in Cox (1980).

Imputation diagnostics consisted of four checks: number of times a donor was used, overall imputation checks, imputation checks by class variables, and multivariate consistency checks. The check for the number of times a donor was used was to ensure that donors were used a reasonable

²⁶ Some NPSAS data were missing for some B&B respondents because they did not respond to NPSAS but did respond to B&B, were identified in NPSAS as graduate students, or were not identified in NPSAS as potential B&B cases.

²⁷ The term *hot deck* refers to the fact that the set of potential donors comes from the same data set. In contrast, *cold deck* imputation refers to the fact that the donors come from an external data set or source.

number of times. Using a donor too many times might indicate that an imputation class had too few donors, and the class needed to be enlarged. The overall imputation checks compared the distributions, weighted and unweighted, for each level of the imputed variable before and after imputation. Differences of 5 percent or more were flagged and examined to see if changes should be made to the imputation specification. The imputation checks by class variables compared the distributions, weighted and unweighted, for each level of the imputed variable in the defined imputation classes before and after the imputation. Differences of 5 percent or more were flagged for further review. Finally, multivariate consistency checks ensured that relationships between variables were maintained and that any special instructions for the imputation were implemented properly.

If any of the four aforementioned diagnostic checks indicated a problem, i.e., a donor was used too many times, substantial deviation from the weighted sums, or any identified inconsistencies, the imputation process was revised and rerun. Some results of the imputation process are provided in Appendix J, which presents the percentage missing for each variable subject to imputation, as well as pre- and postimputation distributions for all of these variables. Appendix M shows that approximately 13 percent of the variables with a response rate less than 85 percent showed statistically significant estimated bias between the pre- and postimputation means and distributions (see section 6.4.2 for more details).

5.7 Composite and Derived Variable Construction

Analysts created the main study analytic variables by examining the data available for each student from the various data sources, prioritizing the data sources on an item-by-item basis, and reconciling discrepancies within and between sources. In some cases, the derived or composite variables were created by simple assignment of a value from the available source with the highest priority. In other cases, interview items were recoded or otherwise summarized to create a derived variable. Similar procedures were used for transcript analytic variables using only data from transcripts and institutions providing transcripts. Details about the creation of each variable appear in the variable descriptions contained in the ECB and PowerStats. For a listing of the set of analysis variables derived for B&B:08/09, see appendix K.

Chapter 6.

Weighting and Variance Estimation

This chapter provides information pertaining to the weighting procedures for B&B:08/09. The development of statistical analysis weights for the B&B:08/09 sample is discussed in section 6.1. Analysis procedures that can be used to produce design-unbiased estimates of sampling variances are discussed in section 6.2, including variances computed using Taylor series and bootstrap replication techniques. Section 6.2 also describes how the Taylor series strata and primary sampling unit (PSU) variables were constructed, and how the bootstrap replicate weights were constructed. Section 6.3 gives weighted and unweighted response rates. Section 6.4 discusses the accuracy of B&B:08/09 estimates for precision and the potential for nonresponse bias.

6.1 Analysis Weights

The weights for analyzing the B&B:08/09 data were derived from the NPSAS:08 weight, because the B&B:08/09 sample members are a subset of the NPSAS:08 sample. As described in chapter 2, a stratified sample of 500 NPSAS:08 student interview nonrespondents was selected with probabilities proportional to their NPSAS:08 sampling weight. The weight for these cases was adjusted for the subsampling. Three weights were developed for analyzing data from the B&B:08/09 data collection. One weight was developed for analyzing sample members who responded to the B&B:08/09 interview. A second weight was developed for analyzing cases with transcript data. A third weight was developed for analyzing cases with both interview and transcript data. The weights were adjusted for nonresponse and were also raked to IPEDS and NPSAS:08 control totals. This section describes the steps that were followed in order to develop each weight.

6.1.1 Analysis Weight for Cases With Student Interview Data

A B&B:08/09 respondent is someone who has a completed, partial, or abbreviated interview. The B&B:08/09 sample consisted of 18,500 students. At the conclusion of the B&B:08/09 data collection, 15,050 students were initially determined to be eligible respondents, 2,120 were nonrespondents, 1,320 were ineligible, and 10 were deceased.

The *2007–08 National Postsecondary Student Aid Study (NPSAS:08) Full-scale Methodology Report* (Cominole et al. 2010) (hereinafter referred to as the NPSAS:08 Full-scale Methodology Report) describes the development of the NPSAS study weight. The statistical analysis weight compensated for the unequal probability of selection of institutions and students in the NPSAS:08 sample. The weight also adjusted for multiplicity at the institution and student levels, unknown student eligibility, nonresponse, and poststratification. The institution weight was computed and then used as a component of the student weight. A weight was computed for NPSAS:08 respondents as the product of the following 10 weight components:

1. institution sampling weight (WT1);
2. institution multiplicity adjustment (WT2);
3. institution poststratification adjustment (WT3);
4. institution nonresponse adjustment (WT4);
5. student sampling weight (WT5);

6. student multiplicity adjustment (WT6);
7. student unknown eligibility adjustment (WT7);
8. student not located adjustment (WT8);
9. student other nonresponse adjustment (WT9); and
10. student poststratification adjustment (WT10).

The B&B:08/09 sample contains both NPSAS study respondents and nonrespondents. Therefore, the B&B:08/09 base weight was formed as the product of the first seven of these adjustment factors.

The subsample of 500 NPSAS:08 student interview nonrespondents was selected with probabilities proportional to the NPSAS:08 student weight. The B&B:08/09 base weight was multiplied by the inverse of this selection probability for the subsampled cases to obtain the weight for cases in the sample.

An adjustment was made for interview nonresponse using a model-based constrained logistic weighting procedure. The weights were then calibrated to IPEDS and weight sums from NPSAS:08, which had been calibrated to IPEDS and external control totals as described in the NPSAS:08 Full-scale Methodology Report.²⁸ The procedure WTADJUST in SUDAAN (RTI, 2008) was used to implement the nonresponse and calibration adjustments. This weighting methodology is described by Folsom and Singh (2000).

The adjustment for nonresponse was performed in multiple steps because the predictors of response propensity are potentially different for interview refusals and other nonrespondents. Using multiple steps of nonresponse adjustment can achieve greater reduction in nonresponse bias than a single-step adjustment.

The first stage of adjustment for interview nonresponse was an adjustment for refusal. The refusal adjustment model included the 17,160 eligible cases who were not deceased; the response (nonrefusal) indicator was set to 1 for the 16,450 interview respondents and other nonrespondents and to 0 for the 720 cases who were interview refusals. Independent variables were chosen that were considered to be predictive of response status and were nonmissing for interview respondents, refusals, and other nonrespondents. Variables for the model include the frame and survey design variables that were used for the NPSAS:08 weight adjustments and other data known for both the respondents and nonrespondents. Candidate predictor variables include:

- institution control;
- region;
- institution enrollment from IPEDS file (categorical);
- Pell Grant receipt (yes/no);
- Pell Grant amount (categorical);
- Stafford Loan receipt (yes/no);

²⁸ Calibration in this chapter generally refers to adjusting the weights to weight sums, and poststratification generally refers to adjusting the weights to external totals. However, these terms are sometimes used interchangeably when referring to both types of adjustments at the same time.

- Stafford Loan amount (categorical);
- Parent Loan for Undergraduate Students (PLUS) amount (categorical);
- federal aid receipt (yes/no);
- institution aid receipt (yes/no);
- state aid receipt (yes/no);
- any aid receipt (yes/no);
- SSN indicator (yes/no);
- NPSAS response status (three levels);
- number of times answering machine was encountered (three levels);
- in field cluster area (yes/no);
- count of phone numbers we have for a student;
- count of e-mail addresses we have for a student; and
- count of mailing addresses we have for a student.

Variables initially included in the nonresponse modeling included all of the candidate predictor variables as well as certain important interaction terms. To detect important interactions for the nonresponse model, a Chi-squared automatic interaction detection (CHAID) analysis was performed on the predictor variables. The CHAID analysis divided the data into segments that differed with respect to the response variable. The segmentation process first divided the sample into groups based on categories of the most significant predictor of response. It then split each of these groups into smaller subgroups based on other predictor variables. It also merged categories of a variable that were found to be nonsignificant. CHAID was run for up to three segments, resulting in the identification of two-way and three-way interactions. Variables that made up the CHAID interaction terms were NPSAS response status, number of times an answering machine was encountered, whether the student was in a field cluster area, counts of phone numbers and e-mail addresses we have for a student, Stafford Loan receipt, and PLUS amount. This initial model did not converge, but as many variables as possible were retained in the model.

Table 38 presents the predictor variables used in the model to adjust the weight for refusals and the average weight adjustment factors resulting from these variables. The refusal weight adjustment factors have the following characteristics:

- minimum: 1.00;
- median: 1.02; and
- maximum: 2.17.

Table 38. Weight adjustment factors for refusal for the B&B:08/09 student interview weight: 2009

Model predictor variables	Number of nonrefusal respondents	Weighted response rate	Average weight adjustment factor
Total	16,450	92.78	1.05
Institution control			
Public	9,480	92.62	1.05
Private nonprofit	6,110	92.76	1.05
Private for-profit	860	95.14	1.02
Institution Region ¹			
New England	840	92.27	1.05
Mideast	2,910	91.83	1.05
Great Lakes	2,570	93.76	1.04
Plains	2,070	91.37	1.06
Southeast	3,790	93.50	1.04
Southwest	1,330	91.33	1.06
Rocky Mountains	760	96.19	1.02
Far West	1,950	92.53	1.05
Outlying areas	220	94.25	1.04
NPSAS:08 institution enrollment size			
4,743 or less	4,160	93.03	1.05
4,744 to 13,042	4,080	93.52	1.04
13,043 to 27,210	4,150	92.96	1.04
27,211 or more	4,050	91.94	1.05
Pell Grant amount received			
None	9,950	92.63	1.05
\$1,580 or less	1,660	93.30	1.04
\$1,581 to \$2,695	1,660	92.95	1.04
\$2,696 to \$4,310	1,520	93.79	1.04
\$4,311 or more	1,660	92.88	1.05
Stafford Loan amount received			
None	7,330	91.99	1.05
\$4,410 or less	2,340	93.05	1.04
\$4,411 to \$5,500	4,310	94.62	1.04
\$5,501 to \$6,500	270	83.50	1.16
\$6,501 or more	2,200	93.43	1.04
PLUS amount received			
None	15,440	93.02	1.04
\$5,000 or less	260	91.69	1.08
\$5,001 to \$9,396	250	87.51	1.08
9,397 to \$14,000	250	80.95	1.18
\$14,001 or more	250	97.74	1.01
Federal aid recipient			
Yes	11,230	93.61	1.04
No	5,220	91.68	1.06
Institution aid recipient			
Yes	8,410	94.74	1.04
No	8,040	91.49	1.06

See notes at end of table.

Table 38. Weight adjustment factors for refusal for the B&B:08/09 student interview weight: 2009—Continued

Model predictor variables	Number of nonrefusal respondents	Weighted response rate	Average weight adjustment factor
State aid recipient			
Yes	6,580	93.91	1.04
No	9,870	92.35	1.05
Any aid recipient			
Yes	14,000	93.83	1.04
No	2,450	89.67	1.07
Preloaded Social Security number			
Yes	15,930	92.83	1.05
No	520	91.72	1.07
NPSAS08 response status			
Interview respondent	16,080	95.57	1.04
Interview nonrespondent and study respondent	360	82.59	1.22
Interview and study nonrespondent	20	97.35	1.03
Count of answering machine encounters			
0	11,010	97.67	1.02
1 or 2	940	89.39	1.07
More than 2	4,500	86.08	1.11
Count of phone numbers			
0	200	95.18	1.03
1	5,390	91.01	1.06
2	6,960	93.50	1.04
More than 2	3,910	94.04	1.04
Count of e-mail addresses			
0	60	89.79	1.11
1	2,450	86.89	1.10
2	7,490	92.85	1.05
More than 2	6,450	97.23	1.02
Count of mailing addresses			
0	180	92.73	1.06
1	7,040	91.18	1.06
2	5,490	93.42	1.04
More than 2	3,740	94.98	1.03
In field cluster			
Yes	11,220	93.44	1.04
No	5,230	91.34	1.06

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington; Outlying Areas = Alaska, Hawaii, and Puerto Rico. Alaska and Hawaii were reclassified from the West to the outlying areas for the purposes of NPSAS.

NOTE: Categories were formed from continuous variables based on quartiles. Detail may not sum to totals because of rounding. B&B = Baccalaureate and Beyond Longitudinal Study. PLUS = Parent Loan for Undergraduate Students. NPSAS = National Postsecondary Student Aid Study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

The second stage of adjustment for interview nonresponse was an adjustment for other interview nonresponse, given that the student did not refuse. The other nonresponse adjustment model included the 16,450 interview respondents and other nonrespondents; the response (nonrefusal) indicator was set to 1 for the 15,050 interview respondents and to 0 for the 1,400 cases who were other nonrespondents. Candidate predictor variables were the same as those listed above for the first nonresponse adjustment model. As in the refusal adjustment, a CHAID analysis was performed on the predictor variables to detect important interactions. Variables that made up the CHAID interaction terms were NPSAS response status, number of times an answering machine was encountered, whether the student was in a field cluster area, and counts of phone numbers, e-mail addresses, and mailing addresses we have for a student. This initial model also did not converge, but as many variables as possible were retained in the model.

Table 39 shows the predictor variables used in the model to adjust the weight for other nonrespondents and the average weight adjustment factors resulting from these variables. The other nonresponse weight adjustment factors have the following characteristics:

- minimum: 1.00;
- median: 1.03; and
- maximum: 4.49.

Table 39. Weight adjustment factors for nonresponse for the B&B:08/09 student interview weight: 2009

Model predictor variables	Number of respondents	Weighted response rate	Average weight adjustment factor
Total	15,050	83.18	1.04
Institution control			
Public	8,680	84.16	1.04
Private nonprofit	5,610	82.83	1.04
Private for-profit	760	71.75	1.02
Institution Region ¹			
New England	760	80.76	1.04
Mideast	2,590	80.01	1.04
Great Lakes	2,380	85.81	1.04
Plains	1,920	82.90	1.05
Southeast	3,450	82.73	1.04
Southwest	1,220	82.60	1.05
Rocky Mountains	720	84.89	1.02
Far West	1,800	86.17	1.05
Outlying areas	210	87.81	1.04
NPSAS:08 institution enrollment size			
4,743 or less	3,820	82.88	1.04
4,744 to 13,042	3,710	83.59	1.04
13,043 to 27,210	3,790	81.20	1.04
27,211 or more	3,730	84.83	1.05
Pell Grant amount received			
None	9,030	82.49	1.04
\$1,580 or less	1,550	85.29	1.03
\$1,581 to \$2,695	1,530	81.67	1.04
\$2,696 to \$4,310	1,420	89.69	1.04
\$4,311 or more	1,530	85.27	1.04
Stafford Loan amount received			
None	6,660	81.29	1.05
\$4,410 or less	2,150	83.02	1.03
\$4,411 to \$5,500	4,020	87.91	1.03
\$5,501 to \$6,500	250	84.27	1.14
\$6,501 or more	1,970	82.34	1.04
PLUS amount received			
None	14,120	82.97	1.04
\$5,000 or less	230	84.00	1.07
\$5,001 to \$9,396	240	85.63	1.07
9,397 to \$14,000	230	88.46	1.16
\$14,001 or more	230	85.69	1.01
Federal aid recipient			
Yes	10,380	85.59	1.04
No	4,670	79.98	1.05

See notes at end of table.

Table 39. Weight adjustment factors for nonresponse for the B&B:08/09 student interview weight: 2009—Continued

Model predictor variables	Number of respondents	Weighted response rate	Average weight adjustment factor
Institution aid recipient			
Yes	7,840	87.76	1.03
No	7,210	80.18	1.05
State aid recipient			
Yes	6,160	89.64	1.04
No	8,890	80.75	1.04
Any aid recipient			
Yes	12,910	86.06	1.04
No	2,140	74.64	1.06
Preloaded Social Security number			
Yes	14,610	84.06	1.04
No	440	66.77	1.06
NPSAS08 response status			
Interview respondent	14,830	90.91	1.04
Interview nonrespondent and study respondent	210	59.02	1.20
Interview and study nonrespondent	10	49.38	1.03
Count of answering machine encounters			
0	10,820	95.73	1.02
1 or 2	870	86.50	1.07
More than 2	3,360	63.37	1.10
Count of e-mail addresses			
0	30	35.25	1.10
1	2,010	67.76	1.08
2	6,840	85.98	1.05
More than 2	6,160	92.59	1.02
Count of mailing addresses			
0	100	30.03	1.05
1	6,520	85.58	1.05
2	5,150	89.63	1.04
More than 2	3,280	75.17	1.02
In field cluster			
Yes	10,300	84.84	1.03
No	4,750	79.59	1.06

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington; Outlying Areas = Alaska, Hawaii, and Puerto Rico. Alaska and Hawaii were reclassified from the West to the outlying areas for the purposes of NPSAS.

NOTE: Categories were formed from continuous variables based on quartiles. Detail may not sum to totals because of rounding. B&B = Baccalaureate and Beyond Longitudinal Study. PLUS = Parent Loan for Undergraduate Students. NPSAS = National Postsecondary Student Aid Study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

To ensure population coverage and consistency with NPSAS:08, the B&B:08/09 interview weights were further adjusted to control totals. Variables used to define the control totals were similar to those used for the poststratification adjustments for NPSAS:08. The control totals for the B&B:08/09 weights were obtained using the weighted sums from NPSAS:08 (using the NPSAS:08 study weights) for these variables for the full B&B cohort (including ineligible and deceased students). The following variables were used in defining control totals from NPSAS:08 weight sums:

- number of Stafford Loan recipients by institution control;²⁹
- total amount of Pell Grants awarded;³⁰ and
- amount of PLUS grants awarded by institution control.

Additionally, control totals were formed from IPEDS counts of bachelor's degree recipients for institution control, gender, and major. The following variables were used in defining control totals from IPEDS:

- fall 2007 recipients of baccalaureate degree by gender;
- fall 2007 recipients of baccalaureate degree by institution control; and
- fall 2007 recipients of baccalaureate degree by major (12 categories).

The control totals from NPSAS include cases who became ineligible or were deceased. Because of this, the ineligible and deceased cases were included in the calibration adjustment to the NPSAS totals but not the IPEDS totals. After the adjustment, the ineligible and deceased cases were dropped from the file; the sum of the final weights estimates the number of the NPSAS:08 population who were eligible for B&B and were still alive at the time of the B&B:08/09 interview.

As part of the calibration process, students with extreme (outlier) weights had different bounds on their adjustment factors to accomplish weight trimming and smoothing in the same step as calibration. Extreme weights were identified as weights greater than the median weight + 3 times the interquartile range or less than the median weight - 3 times the interquartile range. Weight values outside of these bounds were trimmed to the bounds.

Table 40 shows the variables used for the calibration, the values of the control totals, and the average weight adjustment factors for each variable. The last column of table 3 shows the sum of the weights after removing the cases who were ineligible or deceased at the time of the B&B:08/09 data collection. Statistics for the weight adjustment factors are the following

- minimum: 0.05;
- median: 1.62; and
- maximum: 9.32.

The response adjusted, calibrated interview weight is the variable WTA000 on the data file.

²⁹ NPSAS:08 weights were controlled to total Stafford Loan amounts disbursed in addition to the number of Stafford Loan recipients, but the B&B calibration model would not converge with both of these included.

³⁰ The calibration model would not converge with amount of Pell Grants awarded by institution control, so total amount of Pell Grants awarded was used instead.

Table 40. Control totals, weight adjustment factors, and sum of weights for eligible cases for the B&B:08/09 student interview weight raking: 2009

Variables	Control totals	Average weight adjustment factor	Sum of final weights for eligible cases
Total	2,039,160	1.57	1,662,275
Stafford Loan recipient, by institution control			
Public	513,663	1.27	416,513
Private nonprofit	319,657	1.41	277,369
Private for-profit	54,938	2.91	50,902
Pell Grant amount received, by institution control			
Public	764,974,721	1.18	584,454,763
Private nonprofit	364,027,732	1.35	308,179,423
Private for-profit	45,583,888	2.32	41,430,025
PLUS loan amount received, by institution control			
Public	517,118,255	1.28	434,887,912
Private nonprofit	703,318,945	1.48	636,823,947
Private for-profit	22,037,735	2.20	21,594,336
Interview respondent			
Total	1,662,275	1.57	1,662,275
Institution control			
Public	1,044,858	1.44	1,044,858
Private nonprofit	540,683	1.60	540,683
Private for-profit	76,734	2.82	76,734
Gender			
Male	707,336	1.58	707,336
Female	954,939	1.56	954,695
Major			
Missing/unknown	377	0.80	1,576
Liberal arts	263,613	2.09	263,613
Psychology/history	262,980	1.82	262,980
Biology	173,648	0.82	85,308
Physical sciences	23,288	1.50	23,288
Mathematics and statistics	17,241	1.72	17,241
Computer and information sciences	39,701	1.86	39,701
Engineering	85,482	1.38	85,482
Education	110,402	1.56	110,402
Business	356,282	1.96	356,282
Health professions	113,736	1.82	113,736
Social sciences	11,963	2.30	11,963
Agricultural sciences	203,562	1.81	203,562

NOTE: Ineligible cases are included in the "Control total" column but are not included in the "Sum of final weights for eligible cases" column and as a result the two columns are not always identical. B&B = Baccalaureate and Beyond Longitudinal Study.

PLUS = Parent Loan for Undergraduate Students.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table 41 summarizes the weight distributions and the variance inflation due to unequal weighting by institution control. The median student interview weight ranges from 25 for students

whose base-year institution was private for-profit to 82 for students whose base-year institution was public. The mean student interview weight ranges from 96 for students whose base-year institution was private nonprofit to 120 for students whose base-year institution was public. The unequal weighting effect overall is 2.41, and ranges from 2.33 for students whose base-year institution was public to 3.12 for students whose base-year institution was private for-profit.

Table 41. Weight distribution and unequal weighting effects for the B&B:08/09 student interview weight, by institution control: 2009

Institution control	Minimum	First quartile	Median	Third quartile	Maximum	Mean	Unequal weighting effect
Total	0.50	13.69	66.42	154.43	774.57	110.46	2.41
Public	0.54	15.32	82.12	165.97	774.57	120.44	2.33
Private nonprofit	0.66	14.51	55.18	132.89	651.12	96.36	2.41
Private for-profit	0.50	6.04	25.46	122.91	561.50	100.70	3.12

NOTE: B&B = Baccalaureate and Beyond Longitudinal Study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

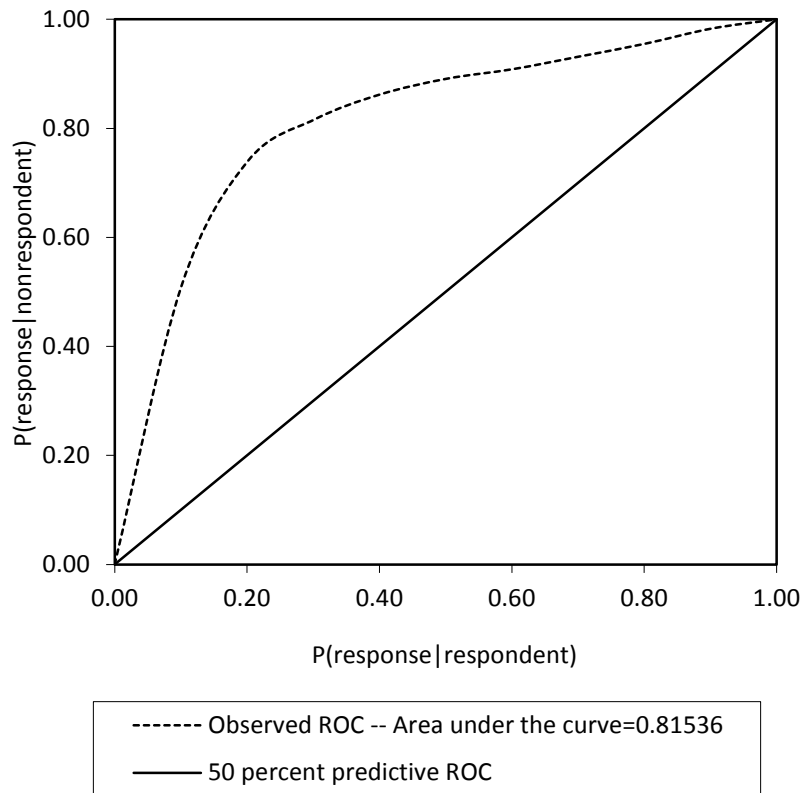
To assess the overall predictive ability of the nonresponse model, a Receiver Operating Characteristic (ROC) curve was used (Hanley and McNeil 1982). The ROC provides a measure of how well the model correctly classified individuals of known response type. For a more detailed example of the use of the ROC curve in nonresponse modeling, see Iannacchione (2003). The ROC curve was developed by calculating, for any specified probability, c , two proportions:

- the proportion of respondents with a predicted probability of response greater than c ; and
- the proportion of nonrespondents with a predicted probability of response greater than c .

The predicted probability of response for each student was the predicted response probability from the weight adjustment model. The plot of the first probability against the second, for c ranging from 0 to 1, resulted in the ROC curve shown in figure 1. The area under the curve measures the probability that a randomly chosen pair of observations—one respondent and one nonrespondent—will be correctly ranked. The probability of a correct pairwise ranking is the same quantity that is estimated by the nonparametric Wilcoxon statistic. The null hypothesis associated with the Wilcoxon statistic is that the variable is not a useful discriminator between the respondent and nonrespondent populations. This corresponds to the null hypothesis that the predicted response probability of a respondent is just as likely to be smaller than the predicted response probability of a nonrespondent as it is to be greater. Thus, if the null hypothesis is true, the ROC curve will be a diagonal line that reflects the equally likely chance of making a correct or incorrect decision, and the area under the curve will be 0.5. If the null hypothesis is not true, the ROC curve will rise above the diagonal and the area under the curve will be significantly greater than 0.5. Figure 19 shows that the area under the ROC curve is 0.82 such that 82 percent of the time (or more than 8 of 10 pairings), the predicted probabilities give the correct classification. The ROC area of 0.82 equals the value of the Wilcoxon test statistic; based on this result we reject the null hypothesis of no predictive ability ($p < 0.05$). This level of discrimination implies that the variables used in the model are highly informative, but not definite predictors of a sample student's overall response propensity. The

predicted probabilities of response (\hat{p}_i) were obtained as the product of the predicted response probabilities obtained at both of the nonresponse adjustment steps. Note that for the second step (other nonresponse adjustment), predicted probabilities were not directly available for students who had already been dropped from the model because, in the previous step, they refused. For these students, their predicted probability was set equal to the mean of the predicted probabilities of students still in the model.

Figure 19. Receiver operating characteristics (ROC) curve for B&B:08/09 interview response propensity: 2009



SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

6.1.2 Analysis Weight for Cases With Transcript Data

A weight was also constructed for analyzing the cases with transcript data. Of the 17,170 students who were eligible for B&B:08/09, 10 were deceased, 16,070 had a transcript from the NPSAS school, and the remaining 1,090 were considered nonrespondents for this weight.

As with the weight described in section 6.1.1, the base weight was formed as the product of the first seven of the NPSAS:08 weight adjustment factors. An adjustment was made for nonresponse using a model-based constrained logistic weighting procedure, then the weights were calibrated to the sums of the B&B:08/09 interview weights for eligible cases. The procedure WTADJUST in SUDAAN was used to implement the nonresponse and calibration adjustments.

The first adjustment was for nonresponse, that is, not having transcript data.³¹ The adjustment model included the 17,160 eligible cases who were not deceased, with the response indicator set to 1 for the 16,070 cases with transcript data and set to 0 for the 1,090 cases who were nondeceased transcript nonrespondents. Predictor variables were chosen if considered to be predictive of response status and were nonmissing for both transcript respondents and nonrespondents. Variables used in the nonresponse adjustment models for NPSAS were also included. Candidate predictor variables included a subset of the variables that were used for the interview weight (see section 6.1.1):

- institution control;
- region;
- institution enrollment from IPEDS file (categorical);
- Pell Grant receipt (yes/no);
- Pell Grant amount (categorical);
- Stafford Loan receipt (yes/no);
- Stafford Loan amount (categorical);
- PLUS amount (categorical);
- federal aid receipt (yes/no);
- institution aid receipt (yes/no);
- state aid receipt (yes/no); and
- any aid receipt (yes/no).

Variables initially included in the nonresponse modeling included all of the candidate predictor variables as well as certain important interaction terms identified using CHAID. CHAID was run for up to three segments, resulting in the identification of two-way and three-way interactions. Variables that made up the CHAID interaction terms for the student transcript weight adjustment included all of the above variables except for federal aid receipt and Pell Grant amount. This initial model did not converge, but as many variables as possible were retained in the model.

Table 42 shows the predictor variables used in the model to adjust the weight and the average weight adjustment factors resulting from these variables. The nonresponse weight adjustment factors have the following characteristics:

- minimum: 1.00;
- median: 1.06; and
- maximum: 2.27.

³¹ Only one nonresponse adjustment was done for the transcript weight as opposed to two for the interview weight.

Table 42. Weight adjustment factors for nonresponse for the B&B:08/09 student transcript weight: 2009

Model predictor variables	Number of respondents	Weighted response rate	Average weight adjustment factor
Total	16,070	81.65	1.08
Institution control			
Public	9,360	81.03	1.07
Private nonprofit	5,860	81.76	1.10
Private for-profit	860	90.22	1.04
Institution Region ¹			
New England	850	80.84	1.08
Mideast	2,840	81.42	1.09
Great Lakes	2,480	84.12	1.07
Plains	2,100	87.30	1.02
Southeast	3,570	79.16	1.12
Southwest	1,360	84.75	1.04
Rocky Mountains	780	87.47	1.04
Far West	1,860	76.54	1.09
Outlying areas	230	80.52	1.14
NPSAS:08 institution enrollment size			
4,743 or less	4,030	81.96	1.09
4,744 to 13,042	3,980	77.05	1.10
13,043 to 27,117	4,000	80.27	1.09
27,118 or more	4,070	85.95	1.04
Pell Grant amount received			
None	9,780	81.36	1.09
\$1,580 or less	1,620	85.77	1.07
\$1,581 to \$2,695	1,620	84.13	1.07
\$2,696 to \$4,310	1,470	82.31	1.04
\$4,311 or more	1,580	77.84	1.09
Stafford Loan amount received			
None	7,240	81.43	1.07
\$4,415 or less	2,280	83.62	1.07
\$4,416 to \$5,500	4,160	85.32	1.07
\$5,501 to \$6,500	260	74.98	1.15
\$6,501 or more	2,130	75.54	1.12
PLUS amount received			
None	15,080	81.49	1.08
\$5,000 or less	250	82.61	1.12
\$5,001 to \$9,396	250	80.70	1.15
9,397 to \$14,000	250	86.20	1.07
\$14,001 or more	250	86.12	1.06
Federal aid recipient			
Yes	10,870	81.80	1.08
No	5,200	81.45	1.08
Institution aid recipient			
Yes	8,120	84.74	1.07
No	7,960	79.70	1.09

See notes at end of table.

Table 42. Weight adjustment factors for nonresponse for the B&B:08/09 student transcript weight: 2009—Continued

Model predictor variables	Number of respondents	Weighted response rate	Average weight adjustment factor
State aid recipient			
Yes	6,360	82.89	1.07
No	9,710	81.19	1.09
Any aid recipient			
Yes	13,590	82.21	1.08
No	2,490	80.06	1.09
CHAID segments			
Institution enrollment less than or equal to 4,743; Stafford Loan amount less than or equal to \$4,415; any aid recipient	10	90.26	1.08
In Mideast region; institution enrollment less than or equal to 4,743; Stafford Loan amount greater than \$4,415 and less than or equal to \$5,500	290	84.82	1.10
In Great Lakes region; institution enrollment less than or equal to 4,743; Stafford Loan amount greater than \$4,415 and less than or equal to \$5,500	210	93.85	1.03
In Plains region; institution enrollment less than or equal to 4,743; Stafford Loan amount greater than \$4,415 and less than or equal to \$5,500	250	88.92	1.03
Institution enrollment less than or equal to 4,743; Stafford Loan amount greater than \$5,500 and less than or equal to \$6,500	70	53.72	1.41
Public institution; institution enrollment greater than or equal to 4,743 and less than or equal to 13,042; Any aid recipient	1,730	78.67	1.09
Private for-profit; institution enrollment greater than or equal to 4,743 and less than or equal to 13,042; Stafford Loan amount less than or equal to \$4,415	50	98.57	1.01
Private for-profit; institution enrollment greater than or equal to 4,743 and less than or equal to 13,042; Stafford Loan amount greater than \$4,415 and less than or equal to \$6,500	40	98.18	1.00
Private for-profit; institution enrollment greater than or equal to 4,743 and less than or equal to 13,042; Stafford Loan amount greater than \$6,500	50	54.80	1.17
In New England region; institution enrollment greater than 13,042 and less than or equal to 27,117; Stafford Loan recipient	70	62.01	1.47
In Mideast region; institution enrollment greater than 13,042 and less than or equal to 27,117; Pell Grant recipient	310	89.24	1.02
Public institution; in Great Lakes region; institution enrollment greater than 13,042 and less than or equal to 27,117	380	72.58	1.21

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington; Outlying Areas = Alaska, Hawaii, and Puerto Rico. Alaska and Hawaii were reclassified from the West to the outlying areas for the purposes of NPSAS.

NOTE: Categories were formed from continuous variables based on quartiles. Detail may not sum to totals because of rounding. B&B = Baccalaureate and Beyond Longitudinal Study. CHAID = chi-square automatic interaction detection; PLUS = Parent Loan for Undergraduate Students.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

To ensure population coverage and consistency with the B&B:08/09 interview weight, the NPSAS:08 weight, and IPEDS, the B&B:08/09 transcript weight was adjusted to control totals determined by the B&B:08/09 interview weight sums. Cases which were deceased were not included in either the control totals or in the cases included in the adjustment. This adjustment was also implemented using the SUDAAN WTADJUST procedure. Variables used to define the control totals were the same as those used for the poststratification coverage adjustments for the B&B:08/09 interview weight, which are listed in section 6.1.1. The control totals for the B&B:08/09 transcript weights were established by the weighted sums from the B&B:08/09 interview weights.

As part of the calibration process, students with extreme (outlier) weights had different bounds on their adjustment factors to accomplish weight trimming and smoothing in the same step as calibration. Extreme weights were identified as weights greater than the median weight + 3 times the interquartile range or less than the median weight - 3 times the interquartile range. Weight values outside of these bounds were trimmed to the bounds.

Table 43 gives the variables used for the calibration, the values of the control totals, and the average weight adjustment factors for each variable. Statistics for the weight adjustment factors are the following:

- Minimum: 0.08;
- Median: 1.52; and
- Maximum: 9.45.

The response adjusted, calibrated transcript weight is the variable WTB000 on the data file.

Table 43. Control totals and weight adjustment factors for the B&B:08/09 student transcript weight raking: 2009

Variables	Control totals	Average weight adjustment factor
Total	1,662,275	1.48
Stafford Loan recipient, by institution control		
Public	416,513	1.21
Private nonprofit	277,369	1.34
Private for-profit	50,902	2.92
Pell Grant amount received, by institution control		
Public	584,454,763	1.13
Private nonprofit	308,179,423	1.26
Private for-profit	41,430,025	2.33
PLUS loan amount received, by institution control		
Public	434,887,912	1.25
Private nonprofit	636,823,947	1.39
Private for-profit	21,594,336	3.01
Institution control		
Public	1,044,858	1.36
Private nonprofit	540,683	1.48
Private for-profit	76,734	2.79
Gender		
Male	707,336	1.48
Female	954,939	1.48
Major		
Missing/unknown	377	0.78
Liberal arts	263,613	1.95
Psychology/history	262,980	1.74
Biology	173,648	0.78
Physical sciences	23,288	1.35
Mathematics and statistics	17,241	1.65
Computer and information sciences	39,701	1.74
Engineering	85,482	1.35
Education	110,402	1.46
Business	356,282	1.79
Health professions	113,736	1.72
Social sciences	11,963	1.97
Agricultural sciences	203,562	1.70

NOTE: B&B = Baccalaureate and Beyond Longitudinal Study. PLUS = Parent Loan for Undergraduate Students.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table 44 summarizes the weight distributions and the variance inflation due to unequal weighting by institution control. The median transcript weight ranges from 22 for students whose

base-year institution was private for-profit to 77 for students whose base-year institution was public. The mean transcript weight ranges from 89 for students whose base-year institution was private for-profit to 112 for students whose base-year institution was public. The unequal weighting effect overall is 2.36, and ranges from 2.28 for students whose base-year institution was public to 3.17 for students whose base-year institution was private for-profit.

Table 44. Weight distribution and unequal weighting effects for the B&B:08/09 student transcript weight, by institution control: 2009

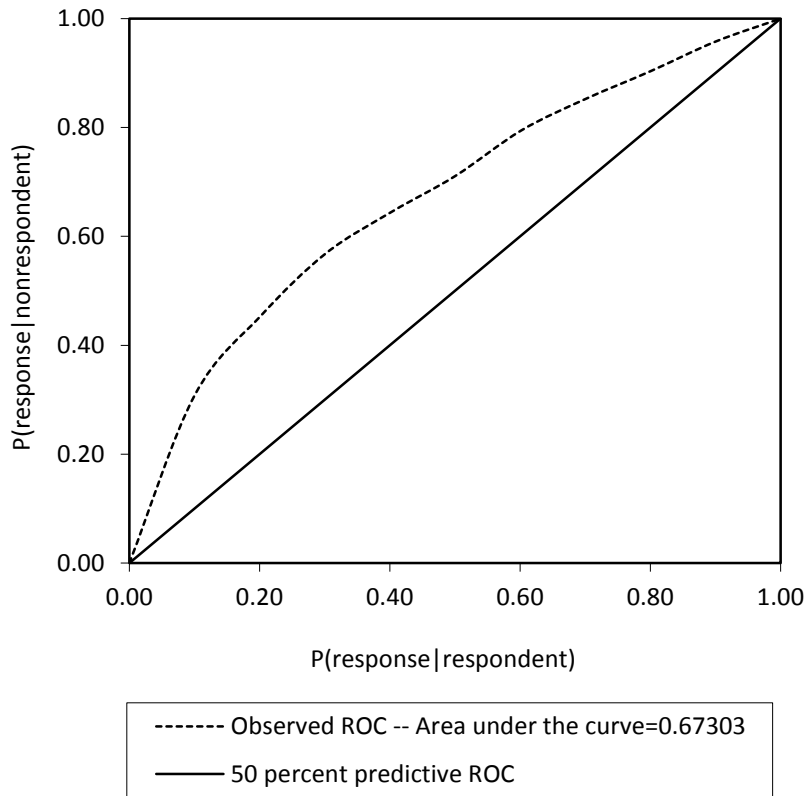
Institution control	Minimum	First quartile	Median	Third quartile	Maximum	Mean	Unequal weighting effect
Total	0.53	13.93	63.17	144.09	705.08	103.42	2.36
Public	0.53	15.67	76.97	151.47	705.08	111.69	2.28
Private nonprofit	0.65	14.25	52.55	129.42	585.48	92.27	2.37
Private for-profit	1.01	5.77	22.03	110.25	533.69	89.43	3.17

NOTE: B&B = Baccalaureate and Beyond Longitudinal Study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

To assess the overall predictive ability of the nonresponse model, an ROC curve was again used to provide a measure of how well the model correctly classified individuals of known response type. The plot of the first probability against the second (that is, the proportion of respondents with a predicted probability of response greater than c versus the proportion of nonrespondents with a predicted probability of response greater than c) for c ranging from 0 to 1, resulted in the ROC curve shown in figure 20. The area under the ROC curve is 0.67, such that 67 percent of the time (or almost 7 of 10 pairings), the predicted probabilities give the correct classification. The ROC area of 0.67 equals the value of the Wilcoxon test statistic; based on this result we reject the null hypothesis of no predictive ability ($p < 0.05$). This level of discrimination implies that the variables used in the model are highly informative but not definite predictors of a sample student's transcript response propensity.

Figure 20. Receiver operating characteristics (ROC) curve for B&B:08/09 transcript response propensity: 2009



SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

6.1.3 Analysis Weight for Cases With Both Student Interview and Transcript Data

A weight was also constructed for analyzing the cases with both student interview and transcript data. Of the 17,070 students who were eligible for both the interview and transcripts,³² 10 were deceased, 14,010 had both a student interview and a transcript from the NPSAS school, and the remaining 3,040 were considered nonrespondents for this weight.

As with the weights described in sections 6.1.1 and 6.1.2, the base weight was formed as the product of the first seven of the NPSAS:08 weight adjustment factors. An adjustment was made for nonresponse using a model-based constrained logistic weighting procedure, then the weights were calibrated to the sums of the B&B:08/09 interview weights for eligible cases. The procedure WTADJUST in SUDAAN was used to implement the nonresponse and calibration adjustments.

The first adjustment was for nonresponse, that is, not having interview or transcript data.³³ The adjustment model included the 17,060 eligible cases who were not deceased, with the response indicator set to 1 for the 14,010 cases with transcript data and set to 0 for the 3,040 cases who were nondeceased interview and transcript nonrespondents. Predictor variables were chosen if considered

³² The number of students eligible for both the interview and transcripts differs from the number of students eligible for the interview or the transcripts due to perturbation (see section 5.5).

³³ Only one nonresponse adjustment was done for the combined interview and transcript weight as opposed to two for the interview weight.

to be predictive of response status and were nonmissing for both interview and transcript respondents and nonrespondents. Variables used in the nonresponse adjustment models for NPSAS were also included. Candidate predictor variables included the same set of variables that was used for the interview weight (see section 6.1.1).

Variables initially included in the nonresponse modeling included all of the candidate predictor variables as well as certain important interaction terms identified using CHAID. CHAID was run for up to three segments, resulting in the identification of two-way and three-way interactions. Variables that made up the CHAID interaction terms for the combined student interview and transcript weight adjustment were NPSAS response status, number of times an answering machine was encountered, whether the student was in a field cluster area, and counts of phone numbers and e-mail addresses we have for a student. This initial model did not converge, but as many variables as possible were retained in the model.

Table 45 shows the predictor variables used in the model to adjust the weight and the average weight adjustment factors resulting from these variables. The nonresponse weight adjustment factors have the following characteristics:

- minimum: 1.01;
- median: 1.14; and
- maximum: 5.18.

Table 45. Weight adjustment factors for nonresponse for the B&B:08/09 combined student interview and transcript weight: 2009

Model predictor variables	Number of respondents	Weighted response rate	Average weight adjustment factor
Total	14,010	62.97	1.31
Institution control			
Public	8,150	62.85	1.29
Private nonprofit	5,140	63.09	1.33
Private for-profit	730	63.90	1.40
Institution Region ¹			
New England	730	61.96	1.26
Mideast	2,390	59.96	1.37
Great Lakes	2,200	69.66	1.24
Plains	1,860	65.00	1.29
Southeast	3,100	60.79	1.38
Southwest	1,180	65.03	1.33
Rocky Mountains	710	71.66	1.23
Far West	1,620	57.84	1.27
Outlying areas	210	66.71	1.18
NPSAS:08 institution enrollment size			
4,760 or fewer	3,540	63.38	1.34
4,761 to 13,042	3,410	59.43	1.34
13,043 to 27,210	3,500	61.05	1.32
27,211 or more	3,560	66.90	1.24
Pell Grant amount received			
None	8,430	62.75	1.33
\$1,580 or less	1,450	68.22	1.22
\$1,581 to \$2,695	1,410	61.52	1.36
\$2,696 to \$4,310	1,320	64.77	1.22
\$4,311 or more	1,400	60.10	1.31
Stafford Loan amount received			
None	6,250	61.66	1.32
\$4,400 or less	2,010	64.11	1.28
\$4,401 to \$5,500	3,730	70.82	1.24
\$5,501 to \$6,417	230	54.51	1.51
\$6,418 or more	1,810	55.27	1.42
PLUS amount received			
None	13,150	62.84	1.31
\$5,000 or less	220	64.55	1.36
\$5,001 to \$9,396	220	64.47	1.36
9,397 to \$14,000	220	62.76	1.37
\$14,001 or more	210	67.31	1.20
Federal aid recipient			
Yes	9,620	64.40	1.29
No	4,390	61.09	1.36
Institution aid recipient			
Yes	7,270	70.80	1.24
No	6,740	58.08	1.38

See notes at end of table.

Table 45. Weight adjustment factors for nonresponse for the B&B:08/09 combined student interview and transcript weight: 2009—Continued

Model predictor variables	Number of respondents	Weighted response rate	Average weight adjustment factor
State aid recipient			
Yes	5,730	69.47	1.24
No	8,290	60.57	1.36
Any aid recipient			
Yes	12,000	65.64	1.28
No	2,020	55.26	1.47
Preloaded Social Security number			
Yes	13,590	64.11	1.30
No	420	52.62	1.53
NPSAS08 response status			
Interview respondent	13,820	71.60	1.30
Interview nonrespondent and study respondent	190	36.77	1.67
Interview and study nonrespondent	10	43.42	2.07
Count of answering machine encounters			
0	10,070	72.48	1.14
1 or 2	820	68.20	1.29
More than 2	3,130	47.31	1.87
Count of phone numbers			
0	90	23.32	1.52
1	4,610	61.54	1.35
2	6,000	65.76	1.28
More than 2	3,320	68.81	1.31
Count of e-mail addresses			
0	30	19.79	1.77
1	1,870	44.86	1.79
2	6,350	65.22	1.31
More than 2	5,770	78.04	1.15
Count of mailing addresses			
0	90	24.02	1.55
1	6,040	61.92	1.33
2	4,830	71.09	1.21
More than 2	3,060	60.48	1.42
In field cluster			
Yes	9,570	65.41	1.26
No	4,450	59.48	1.41

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington; Outlying Areas = Alaska, Hawaii, and Puerto Rico. Alaska and Hawaii were reclassified from the West to the outlying areas for the purposes of NPSAS.

NOTE: Detail may not sum to totals because of rounding. Categories were formed from continuous variables based on quartiles. B&B = Baccalaureate and Beyond Longitudinal Study. PLUS = Parent Loan for Undergraduate Students. NPSAS = National Postsecondary Student Aid Study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

To ensure population coverage and consistency with the B&B:08/09 interview weight, the NPSAS:08 weight and IPEDS, the B&B:08/09 combined interview and transcript weight was adjusted to control totals determined by the B&B:08/09 interview weight sums. Cases which were deceased were not included in either the control totals or in the cases included in the adjustment. This adjustment was also implemented using the SUDAAN WTADJUST procedure. Variables used to define the control totals were the same as those used for the poststratification coverage adjustments for the B&B:08/09 interview weight, which are listed in section 6.1.1. The control totals for the B&B:08/09 transcript weights were established by the weighted sums from the B&B:08/09 interview weights.

As part of the calibration process, students with extreme (outlier) weights had different bounds on their adjustment factors to accomplish weight trimming and smoothing in the same step as calibration. Extreme weights were identified as weights greater than the median weight + 3 times the interquartile range or less than the median weight - 3 times the interquartile range. Weight values outside of these bounds were trimmed to the bounds.

Table 46 gives the variables used for the calibration, the values of the control totals, and the average weight adjustment factors for each variable. Statistics for the weight adjustment factors are the following:

- Minimum: 0.05;
- Median: 1.55; and
- Maximum: 7.67.

The response adjusted, calibrated combined interview and transcript weight is the variable WTC000 on the data file.

Table 46. Control totals and weight adjustment factors for the B&B:08/09 combined student interview and transcript weight raking: 2009

	Control totals	Average weight adjustment factor
Total	1,662,275	1.50
Stafford Loan recipient, by institution control		
Public	416,513	1.23
Private nonprofit	277,369	1.35
Private for-profit	50,902	2.80
Pell grant amount received, by institution control		
Public	584,454,763	1.16
Private nonprofit	308,179,423	1.28
Private for-profit	41,430,025	2.22
PLUS loan amount received, by institution control		
Public	434,887,912	1.24
Private nonprofit	636,823,947	1.44
Private for-profit	21,594,336	2.59
Institution control		
Public	1,044,858	1.40
Private nonprofit	540,683	1.51
Private for-profit	76,734	2.70
Gender		
Male	707,336	1.53
Female	954,939	1.49
Major		
Missing/unknown	377	0.80
Liberal arts	263,613	1.97
Psychology/history	262,980	1.74
Biology	173,648	0.79
Physical sciences	23,288	1.43
Mathematics and statistics	17,241	1.62
Computer and information sciences	39,701	1.79
Engineering	85,482	1.42
Education	110,402	1.45
Business	356,282	1.89
Health professions	113,736	1.73
Social sciences	11,963	2.25
Agricultural sciences	203,562	1.73

NOTE: B&B = Baccalaureate and Beyond Longitudinal Study. PLUS = Parent Loan for Undergraduate Students.
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table 47 summarizes the weight distributions and the variance inflation due to unequal weighting by institution control. The median combined interview and transcript weight ranges from

24 for students whose base-year institution was private for-profit to 86 for students whose base-year institution was public. The mean combined interview and transcript weight ranges from 105 for students whose base-year institution was private nonprofit or private for-profit to 128 for students whose base-year institution was public. The unequal weighting effect overall is 2.43, and ranges from 2.34 for students whose base-year institution was public to 3.14 for students whose base-year institution was private for-profit.

Table 47. Weight distribution and unequal weighting effects for the B&B:08/09 combined student interview and transcript weight, by institution control: 2009

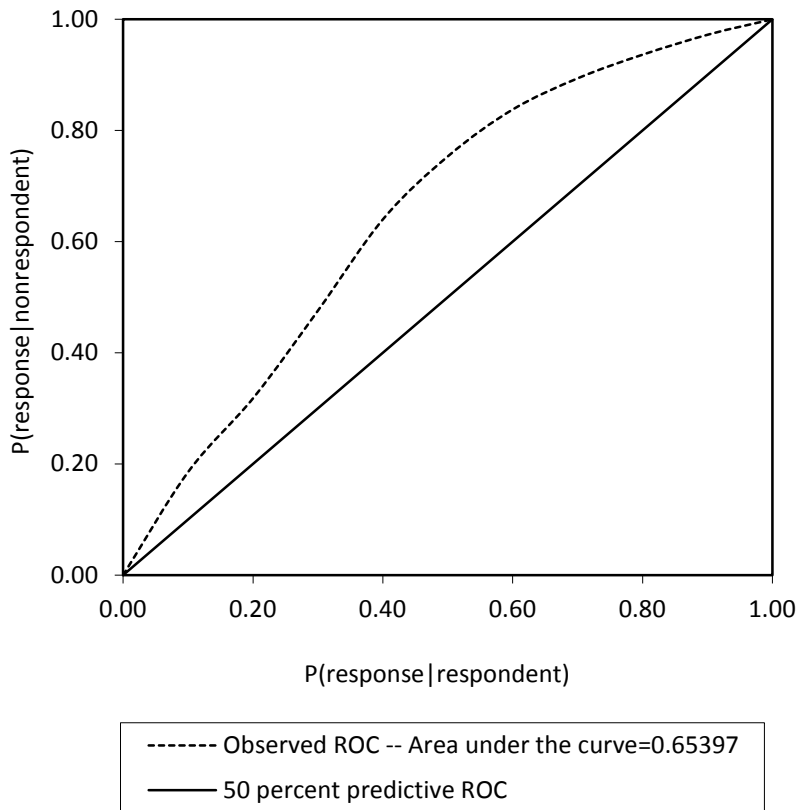
Institution control	Minimum	First quartile	Median	Third quartile	Maximum	Mean	Unequal weighting effect
Total	0.53	14.38	70.52	162.08	782.09	118.62	2.43
Public	0.53	16.22	86.20	171.62	782.09	128.27	2.34
Private nonprofit	0.65	15.11	57.66	142.49	693.01	105.21	2.44
Private for-profit	1.15	6.17	23.98	137.02	600.12	105.26	3.14

NOTE: B&B = Baccalaureate and Beyond Longitudinal Study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

To assess the overall predictive ability of the nonresponse model, an ROC curve was again used to provide a measure of how well the model correctly classified individuals of known response type. The plot of the first probability against the second (that is, the proportion of respondents with a predicted probability of response greater than c versus the proportion of nonrespondents with a predicted probability of response greater than c) for c ranging from 0 to 1, resulted in the ROC curve shown in figure 21. The area under the ROC curve is 0.65, such that 65 percent of the time (or more than 6 of 10 pairings), the predicted probabilities give the correct classification. The ROC area of 0.65 equals the value of the Wilcoxon test statistic; based on this result we reject the null hypothesis of no predictive ability ($p < 0.05$). This level of discrimination implies that the variables used in the model are highly informative but not definite predictors of a sample student's response propensity.

Figure 21. Receiver operating characteristics (ROC) curve for B&B:08/09 combined interview and transcript response propensity: 2009



SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

6.2 Variance Estimation

For probability-based sample surveys, most estimates are nonlinear statistics. For example, a mean or proportion, which is expressed as

$$\bar{m} = \frac{\sum_i w_i x_i}{\sum_i w_i y_i}$$

is nonlinear because the denominator is a survey estimate of the (unknown) population total. In this situation, the variances of the estimates cannot be expressed in closed form. Two procedures for estimating variances of survey statistics are the Taylor series linearization procedure and the bootstrap replication procedure. Variables to use for both of these variance estimation procedures are available on the B&B:08/09 data files. The analysis strata and replicates created for the Taylor series procedure are discussed in section 6.2.1, and section 6.2.2 discusses the replicate weights created for the bootstrap procedure.

6.2.1 Taylor Series

The Taylor series variance estimation procedure is a well-known technique used to estimate the variances of nonlinear statistics. The procedure takes the first-order Taylor series approximation

of the nonlinear statistic and then substitutes the linear representation into the appropriate variance formula based on the sample design. Woodruff (1971) presented the mathematical formulation of this procedure.

For stratified multistage surveys, the Taylor series procedure requires variance estimation strata and variance estimation PSUs, also called replicates, defined from the sampling strata and PSUs used in the first stage of sampling. Because B&B:08/09 is a follow-up study of NPSAS:08, the variance estimation strata and PSUs for B&B:08/09 were derived from the variance estimation strata and PSUs that were developed for NPSAS:08. The steps in the construction of the NPSAS:08 stratum and PSU variables are described in chapter 6 of the NPSAS:08 Full-scale Methodology Report (Cominole et al. 2010).

The variance estimation formulas require at least two PSUs in each stratum. The NPSAS:08 variance estimation strata and PSUs were examined for the B&B:08/09 sample, and strata with only one PSU were combined with other strata to obtain at least two PSUs. The following three rules were used: variance estimation strata were combined with other variance estimation strata within the original NPSAS:08 sampling strata, certainty schools were combined with other certainty schools, and noncertainty schools were combined with other noncertainty schools. In addition, the original sort order that was used for constructing the NPSAS:08 variance estimation strata and PSUs was used. If the stratum was the first in the sorted list, then it was combined with the next stratum in the list. The single PSU then became an additional PSU in the new variance estimation stratum. The resulting variance estimation strata and PSUs for B&B:08/09 are the variables ANALSTR and ANALPSU. Note that these strata and PSUs were formed such that they are applicable to use with any of the three analysis weights described in section 6.1.

The procedure described above may overestimate the variance because it does not always account for the finite population correction (FPC) at the institution stage of sampling. The Taylor series procedure can account for the FPC if the secondary sampling units (SSUs) and PSU counts are considered in addition to the analysis strata and analysis PSUs. An alternate variance estimation method using replicate weights to account for the FPC is also provided for users of the B&B:08/09 data, as described below.

6.2.2 Bootstrap Replicate Weights

The variance estimation strategy that was chosen for B&B:08/09 is the same as that used for NPSAS:08 and satisfies the following requirements:

- recognition of variance reduction due to stratification at all stages of sampling;
- recognition of effects of unequal weighting;
- recognition of possible increased variance due to sample clustering;
- recognition of effects of weight adjustments for nonresponse and for calibration of selected total estimates to known external totals or weight sums;
- satisfactory properties for estimating variances of nonlinear statistics and quantiles (such as the median) as well as for linear statistics;
- ability to apply finite population corrections at the institution stage of sampling and reflect the reduction in variance due to the high sampling rates in some first-stage sampling strata; and

- ability to test hypotheses about students based on normal distribution theory by ignoring the finite population corrections at the student level of sampling.

The Flyer-Kott methodology was used to develop a vector of bootstrap sample weights that was added to the analysis file. These weights are zero for units not selected in a particular bootstrap sample; weights for other units are inflated for the bootstrap subsampling. The initial analytic weights for the complete sample are also included for the purposes of computing the desired estimates. The vector of replicate weights allows for computing additional estimates for the sole purpose of estimating a variance. Assuming B sets of replicate weights, the variance of any estimate, $\hat{\theta}$, can be estimated by replicating the estimation procedure for each replicate and computing a simple variance of the replicate estimates, as follows:

$$\text{var}(\hat{\theta}) = \frac{\sum_{b=1}^B (\hat{\theta}_b^* - \hat{\theta})^2}{B},$$

where $\hat{\theta}_b^*$ is the estimate based on the b -th replicate weight and B is the total number of sets of replicate weights. Once the replicate weights are provided, this estimate can be produced by most survey software packages (e.g., SUDAAN [RTI International 2008] computes this estimate by invoking the DESIGN=BRR option).

The number of replicate weights was set at 200 for NPSAS:08 based on work that showed that this number of replicates has desirable properties for variance estimation in regression analyses. For the 200 replicate weights included on the weights file, both the nonresponse adjustment and calibration process were repeated so that the variance of survey estimates would include the variability due to the weight adjustments. For some of the replicates, not all of the control totals could be met because of model convergence problems, i.e. there was no solution to satisfy all model equations simultaneously. The analysis and replicate weights that are available on the weights file for B&B:08/09 are the following:

Type of respondents	Analysis weight	Replicate weights
Interview respondents	WTA000	WTA001–WTA200
Transcript respondents	WTB000	WTB001–WTB200
Interview and transcript respondents	WTC000	WTC001–WTC200

6.3 Overall Weighted and Unweighted Response Rates

The overall B&B:08/09 response rate is an estimate of the proportion of the study population directly represented by the respondents. Because the B&B:08/09 study includes a subsample of NPSAS:08 nonrespondents, the overall B&B:08/09 response rate is the product of the NPSAS:08 institution-level response rate times the B&B:08/09 student-level response rate. Therefore, the overall B&B:08/09 response rates can only be estimated directly for defined institution characteristics.

Table 48 gives the unweighted and weighted NPSAS:08 base-year institution and B&B:08/09 student response rate components by institution control. Only the weighted response rates can be interpreted as estimates of the proportion of the B&B:08/09 population that is directly represented by the respondents. The types of student respondents included in table 48 are the following:

- B&B:08/09 interview respondents;
- B&B:08/09 transcript respondents (i.e., cases with any transcript data); and
- B&B:08/09 interview and transcript respondents (i.e., cases with both interview and transcript data).

Table 48. Unweighted and weighted NPSAS:08 institution response rates and B&B:08/09 student interview, transcript, and combined interview and transcript response rates, by institution control: 2009

Institution control (base year)	Institution response rate		Eligible sample size	Respon- dents	Response rate		Overall response rate	
	Un- weighted	Weighted			Un- weighted	Weighted	Un- weighted	Weighted
B&B:08/09 interview respondents								
Total	89.0	90.1	17,160	15,050	87.7	78.3	78.0	70.5
Public	91.9	91.2	9,910	8,680	87.5	79.1	80.5	72.1
Private nonprofit	87.4	86.7	6,360	5,610	88.2	77.9	77.1	67.5
Private for-profit	83.6	88.2	890	760	85.5	69.6	71.5	61.4
B&B:08/09 transcript respondents								
Total	89.0	90.1	17,160	16,070	93.6	92.3	83.3	83.1
Public	91.9	91.2	9,910	9,360	94.4	93.0	86.8	84.8
Private nonprofit	87.4	86.7	6,360	5,860	92.1	90.4	80.5	78.4
Private for-profit	83.6	88.2	890	860	96.3	96.3	80.5	85.0
B&B:08/09 combined interview and transcript respondents								
Total	89.0	90.1	17,060	14,010	82.2	73.1	73.1	65.8
Public	91.9	91.2	9,840	8,150	82.8	74.4	76.1	67.8
Private nonprofit	87.4	86.7	6,330	5,140	81.2	71.2	71.0	61.8
Private for-profit	83.6	88.2	890	730	82.1	68.3	68.6	60.2

NOTE: Detail may not sum to totals because of rounding. Base-year institution response rates were obtained from the 2007–08 National Postsecondary Student Aid Study (NPSAS:08) Methodology Report (Cominole et al. 2010, table 9, p. 50). Overall response rates are the product of the NPSAS:08 and B&B:08/09 response rates. The eligible student counts for the combined interview and transcript differ from the counts for the student interview and the student transcript due to perturbation. B&B = Baccalaureate and Beyond Longitudinal Study.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

The institution-level response rates shown in table 42 are the percentage of institutions that provided sufficient data to select the NPSAS:08 student-level sample; these rates are presented and discussed in the NPSAS:08 Full-scale Methodology Report (Cominole et al. 2010, table 9, p.50).

Table 48 shows that approximately 78 percent of the eligible sample responded to the B&B:08/09 interview. The rate varied from 70 percent to 79 percent, by type of institution. The overall weighted response rate, incorporating the NPSAS:08 base-year institution response rate, was 71 percent. The interview analysis weight described in section 6.1.1 (WTA000) was developed to compensate for the potentially biasing effects of interview nonresponse.

Table 48 also provides weighted response rates for the transcript data collection component. Overall, a transcript was collected from 92 percent of the eligible students. This varied, by type of institution, from 90 percent to 96 percent. An analysis weight (the weight variable WTB000) was developed for analyzing students with transcript data.

Overall, 73 percent of the sample were respondents to both the interview and the transcript data collection. This rate varied, by type of institution, from 68 percent to 74 percent. The weight variable WTC000 was developed for analyzing students with both interview and transcript data.

Section 6.4.2 analyzes the potential bias due to unit nonresponse and the effect the weight adjustments had in reducing the bias.

6.4 Accuracy of Estimates

The accuracy of survey statistics is affected by both random and nonrandom errors. Random errors reduce the precision of survey estimates, while nonrandom errors result in bias (i.e., estimates that do not converge to the true population parameter as the sample size increases without limit).

The sources of error in a survey are often dichotomized as sampling and nonsampling errors. *Sampling error* refers to the error that occurs because the survey is based on a sample of population members rather than the entire population. All other types of errors are *nonsampling errors*, including survey nonresponse (because of inability to contact sampling members, their refusal to participate in the study, etc.) and measurement errors, such as the errors that occur because the intent of survey questions was not clear to the respondent, because the respondent had insufficient knowledge to answer correctly, or because the data were not captured correctly (e.g., because of recording, editing, or data entry errors).

The sampling errors are primarily random errors for well-designed surveys such as NPSAS:08 and B&B:08/09. However, nonrandom errors can occur if the sampling frame does not provide complete coverage of the target population. The B&B:08/09 survey instrument and data collection procedures were subjected to thorough development and testing to minimize nonsampling errors, because these errors are difficult to quantify and are likely to be nonrandom errors.

In this section sampling errors and design effects for some B&B:08/09 estimates are presented for a variety of domains; these sampling errors and design effects are computed using the analysis weights that were constructed for analyzing the B&B:08/09 student and transcript data.

Next, the results of analyses comparing B&B:08/09 nonrespondents and respondents using characteristics known for both nonrespondents and respondents are presented. An analysis of nonresponse bias is presented at both the student level and the item level.

6.4.1 Measures of Precision: Standard Errors and Design Effects

The survey design effect for a statistic is defined as the ratio of the design-based variance estimate divided by the variance estimate that would have been obtained from a simple random sample of the same size. The design effect is often used to measure the effects that sample design features have on the precision of survey estimates. For example, stratification tends to decrease the variance, but multistage sampling and unequal sampling rates usually increase the variance. Weight adjustments for nonresponse (performed to reduce nonresponse bias) and calibration often increase the variance because they can increase the weight variation. Because of these factors, estimates from

most complex multistage sampling designs such as B&B:08/09 have design effects greater than 1.0. That is, the design-based variance is larger than the simple random sample variance.

Specifically, the survey design effect for a given estimate, $\hat{\theta}$, is defined as

$$Deff(\hat{\theta}) = \frac{Var_{design}(\hat{\theta})}{Var_{srs}(\hat{\theta})}.$$

The square root of the design effect can also be expressed as the ratio of the standard errors, or

$$Deft(\hat{\theta}) = \frac{SE_{design}(\hat{\theta})}{SE_{srs}(\hat{\theta})}.$$

In appendix L, design effect estimates are presented for important survey domains to summarize the effects of stratification, multistage sampling, unequal probabilities of selection, and the weight adjustments. These design effects were estimated for interview and transcript data using SUDAAN and the bootstrap variance estimation procedure described in section 6.2.2. If an analysis of B&B:08/09 data must be performed without using one of the software packages for analysis of complex survey data, the design effect tables in appendix L can be used to make approximate adjustments to the standard errors of survey statistics computed using the standard software packages that assume simple random sampling designs. However, one cannot be confident about the actual design-based standard errors without performing the analysis with one of the software packages specifically designed for analysis of data from complex sample surveys.

Large design effects imply large standard errors and relatively poor precision. Small design effects imply small standard errors and good precision. In general terms, a design effect under 2.0 is low, 2.0 to 3.0 is moderate, and above 3.0 is high. Moderate and high design effects often occur in complex surveys such as B&B:08/09, and the design effects in appendix L are consistent with those in past B&B studies. Unequal weighting causes large design effects and is often as a result of nonresponse and poststratification adjustments. However, in B&B:08/09 (as in NPSAS:08), the unequal weighting is also due to the sample design, different sampling rates between institution strata, different sampling rates between student strata, and subsampling of the nonrespondents that were included in B&B:08/09.

6.4.2 Measure of Bias

The bias in an estimated mean based on respondents, \bar{y}_R , is the difference between this mean and the target parameter, π , that is, the mean that would be estimated if a complete census of the target population was conducted and everyone responded. This bias can be expressed as follows, where $E(\bar{y}_R)$ is the expected value of the mean based on respondents over repeated samples:

$$B(\bar{y}_R) = E(\bar{y}_R) - \pi.$$

The estimated mean based on nonrespondents, \bar{y}_{NR} , can be computed if data for the particular variable are available for most of the nonrespondents. The true target parameter, π , can be estimated for these variables as follows:

$$\hat{\pi} = (1 - \eta)\bar{y}_R + \eta\bar{y}_{NR},$$

where η is the weighted unit (or item) nonresponse rate. For the variables that are from the frame, rather than from the sample, π can be estimated without sampling error. The bias can then be estimated as follows:

$$\hat{B}(\bar{y}_R) = \bar{y}_R - \hat{\pi}$$

or, equivalently,

$$\hat{B}(\bar{y}_R) = \eta(\bar{y}_R - \bar{y}_{NR}).$$

This formula shows that the estimate of the nonresponse bias is the difference between the mean for respondents and nonrespondents multiplied by the weighted nonresponse rate.

Nonresponse bias analysis was conducted when the response rate at any level (institutions, students, items) was below 85 percent.³⁴ Institution nonresponse bias was performed as a part of NPSAS:08 and is described in the NPSAS:08 Full-scale Methodology Report (Cominole et al. 2010). A student nonresponse bias analysis was performed for the interview and the combined interview and transcript, and an item nonresponse bias analysis was also performed for both the interview and transcript data. The remainder of this section summarizes the unit and item nonresponse bias analyses that were conducted for B&B:08/09.

Unit nonresponse bias analysis. Unit nonresponse bias analyses were conducted for the following sets of respondents:

- B&B:08/09 interview respondents versus the full set of cases eligible for B&B:08/09 (interview respondents and interview nonrespondents), before and after the weight adjustment that resulted in the B&B:08/09 interview weight (WTA000);
- B&B:08/09 interview respondents versus B&B:08/09 interview nonrespondents, before the weight adjustment that resulted in the B&B:08/09 interview weight (WTA000);
- Interview and transcript respondents versus the full set of cases eligible for B&B:08/09 (interview and transcript respondents and interview and transcript nonrespondents), before and after the combined interview and transcript weight adjustment that resulted in the B&B:08/09 student transcript weight WTC000; and
- Interview and transcript respondents versus interview and transcript nonrespondents, before the combined interview and transcript weight adjustment that resulted in the B&B:08/09 student transcript weight WTC000.

The *NCES Statistical Standards* (NCES 2003) requires a bias analysis for any stage of a sample with a response rate less than 85 percent. From table 48, the weighted B&B:08/09 transcript response rate was greater than 85 percent overall and by control. Therefore, a unit-level nonresponse bias analysis was not necessary for transcripts.

Tables in appendix M give the bias estimates as a result of the analyses listed above. The nonresponse bias was estimated for variables obtained from the sampling frame and from the NPSAS:08 data collection that are known for both respondents and nonrespondents. In all of the tables, the bias was estimated as follows. First, the percentage distribution was obtained for the respondents using the weight before and after weight adjustments. Next, the percentage distribution

³⁴ See *NCES Statistical Standards* (U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics 2003) for a discussion of nonresponse bias analysis.

was obtained for the overall sample using the B&B:08/09 base weight (described above). Then, the bias was estimated as the difference in the percentages. Statistical tests of the bias were also computed using Taylor series estimates of the standard errors, and the tables in appendix M indicate when the bias is statistically different from zero.

It is also informative to compare the distributions of the respondents and nonrespondents before weight adjustments, and the tables in appendix M include columns that give the weighted distributions of respondents and nonrespondents. From the above formulas, the bias prior to the weight adjustment can also be obtained as the nonresponse rate multiplied by the difference between respondents and nonrespondents. When the bias before the weight adjustment is statistically significant, the differences between the respondent and nonrespondent distributions are almost always statistically significant. Similarly, when the differences between the respondent and nonrespondent distributions are statistically significant, the bias is also statistically significant. When one is statistically significant but not the other, the p-values are very close to 0.05. The p-values are not identical because of the sampling error associated with the nonresponse rate. The results of the statistical tests are provided in appendix M for comparing the respondent and nonrespondent percentages.

The variables that were used in the analyses for all sample members are the following:

- institution control;
- region;
- institution enrollment from IPEDS file (categorical);
- Pell Grant receipt (yes/no);
- Stafford Loan receipt (yes/no);
- federal aid receipt (yes/no);
- institution aid receipt (yes/no);
- state aid receipt (yes/no); and
- any aid receipt (yes/no).

The variables that were used in the analyses for sample members who were federally aided during NPSAS:08 are the following:

- Pell Grant amount (categorical);
- Stafford Loan amount (categorical); and
- PLUS amount (categorical).

The nonresponse bias was estimated for the above variables and tested to determine if the bias was significant at the 5 percent level. The tests are reported to be statistically significant if the p value is less than .05. Relative bias was also estimated and computed as the bias divided by the estimate of the full sample. Results are given in appendix M for all institutions combined and by institution control.

Table 49 summarizes the results of the bias analysis for interview respondents before and after weight adjustments overall and by institution control. From table 48, the weighted B&B:08/09

interview response rate was less than 85 percent overall and for each of the three institution controls. This summary shows the estimated relative bias prior to the weight adjustment using the B&B:08/09 base weight or, equivalently, compared the B&B:08/09 interview respondents and interview nonrespondents. The summary also shows the estimated relative bias after the weight adjustments using the B&B:08/09 interview weight WTA000 or, equivalently, compared the B&B:08/09 interview respondents and the full sample. Tables in appendix M provide the detailed bias estimates for the interview bias analyses.

As shown in table 49, some significant bias remains after the student interview weight adjustments. Significant bias was reduced after the nonresponse weighting adjustments for the variables known for respondents and nonrespondents. However, the calibration adjustment to IPEDS and NPSAS:08 totals caused some significant bias to reappear. The calibration was necessary to match the baccalaureate counts in B&B:08/09 to known IPEDS counts and NPSAS:08 weighted estimates of federal aid receipt and to get the B&B:08/09 weights and estimates more in line with the NPSAS:08 weights and estimates for the B&B:08/09 students.

Table 49. Summary of components of the B&B:08/09 analysis weights: 2009

Weight component	Purpose
All weights	
NPSAS:08 adjustments	
Institution sampling weight	Account for the institution's probability of selection
Institution multiplicity adjustment	Adjust the weights for institutions that had multiple chances of selection
Institution poststratification adjustment	Adjust the institution weights to match population enrollment totals to ensure population coverage
Institution nonresponse adjustment	Adjust the institution weights to compensate for nonresponding institutions
Student sampling weight	Account for the student's probability of selection
Student multiplicity adjustment	Adjust the weights for students who attended more than one institution
Student unknown eligibility adjustment	Adjust the weights of nonresponding NPSAS:08 students with unknown eligibility
B&B:08/09 adjustments	
Student subsampling adjustment	Adjust the weights of the subset of NPSAS:08 interview nonrespondents who were included in the B&B:08/09 sample
Student interview analysis weight	
Interview nonresponse adjustment	Adjust the weights to compensate for B&B:08/09 students who did not respond to the interview
Interview poststratification adjustment	Adjust the student weights to match NPSAS:08 weight sums and known population totals from IPEDS to ensure population coverage. Includes trimming and smoothing of the weights to reduce unequal weighting.
Student transcript analysis weight	
Transcript nonresponse adjustment	Adjust the weights to compensate for B&B:08/09 students for whom a transcript was not collected
Transcript poststratification adjustment	Adjust the student weights to match NPSAS:08 weight sums and known population totals from IPEDS to ensure population coverage. Includes trimming and smoothing of the weights to reduce unequal weighting.
Combined student interview and transcript analysis weight	
Transcript nonresponse adjustment	Adjust the weights to compensate for B&B:08/09 students who did not respond to the interview and for whom a transcript was not collected
Transcript poststratification adjustment	Adjust the student weights to match NPSAS:08 weight sums and known population totals from IPEDS to ensure population coverage. Includes trimming and smoothing of the weights to reduce unequal weighting.

NOTE: All adjustments in the student interview, student transcript, and combined weights are B&B:08/09 adjustments.

B&B = Baccalaureate and Beyond Longitudinal Study. NPSAS = National Postsecondary Student Aid Study. IPEDS = Integrated Postsecondary Education Data System.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table 50 summarizes the results of the bias analysis for students who were both interview and transcript respondents before and after weight adjustments overall and by institution control. From table 48, the weighted B&B:08/09 interview response rate was less than 85 percent overall and for each of the three institution controls. This summary shows the estimated relative bias prior to the weight adjustment using the B&B:08/09 base weight or, equivalently, compared the B&B:08/09 interview and transcript respondents and interview and transcript nonrespondents. The summary also shows the estimated relative bias after the weight adjustments using the B&B:08/09 combined interview and transcript weight WTC000 or, equivalently, compared the B&B:08/09 interview and

transcript respondents and the full sample. Tables in appendix M provide the detailed bias estimates for the combined interview and transcript bias analyses.

Table 50 shows some reduction of significant bias but significant bias still remains. Similar to the student interview bias analysis, the calibration causes significant bias to reappear after the nonresponse adjustments.

Table 50. Summary of student interview nonresponse bias analysis, by type of institution: 2009

Nonresponse bias statistics	Overall	Public	Private nonprofit	Private for-profit
Before weight adjustments				
Mean estimated relative bias	3.90	4.56	6.00	10.73
Median estimated relative bias	3.14	3.95	4.60	6.79
Percent of variable categories significantly biased	27.50	32.43	38.89	8.11
After weight adjustments				
Mean estimated relative bias	4.81	6.98	8.87	36.71
Median estimated relative bias	3.78	5.26	8.20	24.09
Percent of variable categories significantly biased	42.50	40.54	36.11	21.62

NOTE: Nonresponse bias analysis for selected variables was conducted for the three types of institutions with a weighted response rate less than 85 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond (B&B:08/09).

Item nonresponse bias analysis. When item response rates were less than 85 percent, the NCES Statistical Standards required that a nonresponse bias analysis be conducted. This analysis was conducted on the data items collected in the B&B:08/09 interview based on interview respondents and for variables derived from student transcript data collection. As shown in the equation below, item response rates (*RRI*) are calculated as the ratio of the number of respondents for whom an in-scope response was obtained (I^x for item x) to the number of respondents who are asked to answer that item. The number asked to answer an item is the number of unit-level respondents (I) minus the number of respondents with a valid skip for item x (V^x). When an abbreviated questionnaire is used to convert refusals, the eliminated questions are treated as item nonresponse (NCES 2003):

$$RRI^x = I^x \div (I - V^x).$$

Item response rates were computed using nonimputed data. Valid skips were later logically imputed to the follow-up items after the gate question was imputed (but these imputed skips count as missing for computing the response rate). Table J-1 in appendix J lists the items from the B&B:08/09 interview along with the number of cases who were eligible to answer each item, and the weighted item response rates and nonresponse rates. The B&B:08/09 interview weight (WTA000) was used to calculate the response rates. The nonresponse rate was also the same as the percentage of cases for which the item was imputed. As mentioned earlier, cases who did not respond to a gate item were treated as missing for the items within the gate. Of the 368 items listed in table J-1, 149 had an item response rate less than 85 percent.

Table J-4 lists the derived variables from the transcript data along with the number of eligible cases and the weighted item response rates and nonresponse rates. The B&B:08/09 student

transcript analysis weight (WTB000) was used to calculate the response rates. Of the 202 variables, all but nine had a response rate greater than 85 percent.

A nonresponse bias analysis was conducted for items with a weighted response rate less than 85 percent for all B&B:08/09 interview respondents, and for derived transcript variables with weighted response rates less than 85 percent. The possibility of estimating the degree of bias depends on having some variables that reflect key characteristics of respondents and for which there is little or no missing data. The variables that were used (from the bulleted list above) are known for all B&B:08/09 interview respondents. These variables are important to the study and are related to many of the items being analyzed for low item response rates. For the items with a weighted response rate less than 85 percent, the nonresponse bias prior to imputation was estimated for each of these characteristics that are known for respondents.

Table M-9 in appendix M illustrates the estimated bias (prior to item imputation) for one item (B1ADMSUP – Teacher satisfaction: Administrative support) for B&B:08/09 interview respondents. Similar computations were performed and tabulations were produced for each of the items. Table M-10 summarizes the results of the item nonresponse bias analysis for each of the items from the student interview, and gives the mean and median relative bias and the percentage of the variable categories with statistically significant bias. Across the items, the percentage of variables with statistically significant bias ranged from 3 percent to 98 percent. Table M-11 gives the same analysis for the derived transcript items that have a weighted item response rate less than 85 percent.

Item imputation was used to fill in missing data for B&B:08/09 interview respondents and nonrespondents, as described in chapter 5. Item imputation was expected to reduce the bias due to item nonresponse, and was used instead of a separate weight adjustment for nonresponse for each item. All of the questionnaire items that are listed in table J-1 were imputed using the imputation process described in chapter 5.

A by-product of imputation was the reduction or elimination of item-level nonresponse bias. While item-level bias before imputation was measurable, after imputation it was not. As a result, how well an imputation procedure worked in reducing bias could not be directly evaluated. Instead, the before- and after-imputation item estimates were compared to determine whether the imputation significantly changed the biased estimates, thus suggesting a reduction in bias. Weighted estimates were computed using the nonimputed data (including only those cases who responded to the item) and also using the imputed data (including cases who responded to the item and also cases with imputed data for the item). Table J-2 gives the means before and after imputation for the continuous variables, and table J-3 gives the distributions before and after imputation for the categorical variables. These tables also give the difference between the preimputation and postimputation estimates. The difference between the pre- and postimputation estimates was statistically significant for 13 percent of the variables and variable categories (see table M-10). This suggests that imputation was only slightly successful in reducing the bias due to item nonresponse.

Imputation was not performed for the items obtained from student transcript data. A weight, adjusted for students without any transcript data, was computed. Most of the variables that were derived from the transcript data have high item response rates (table J-4).

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Appendix A

NPSAS:08 Institution and Student Sampling Details

NPSAS:08 Institution and Student Sampling Details

To develop the mathematical foundation for the 2007–08 National Postsecondary Student Aid Study (NPSAS:08) institutional and student sampling design, the following notation is used to represent the institutional and student sampling strata:

$r = 1, 2, \dots, 46$ indexes the institutional strata, and

$s = 1, 2, \dots, 20$ indexes the student strata.

The strata accounted for selection of institutions in the six states where there were representative samples. The institution measure of size (described below) accounted for student counts and sampling rates.

Further define the following notation:

$j = 1, 2, \dots, J(r)$ indexes the institutions that belong to institutional stratum r ,

$M_{rs}(j)$ = number of students enrolled during the NPSAS year who belong to student stratum s at the j -th institution in stratum r based on the latest IPEDS data, and

m_{rs} = number of students to be selected from student stratum s within the r -th institutional stratum, referred to henceforth as student stratum rs .

The overall population sampling rate for student stratum rs , is then given by

$$f_{rs} = m_{rs} / M_{rs}(+),$$

where

$$M_{rs}(+) = \sum_{j=1}^{J(r)} M_{rs}(j).$$

The student sampling rates, f_{rs} , were computed based on the final sample allocation and IPEDS data regarding the population sizes.

The composite measure of size for the j -th institution in stratum r will then be defined as

$$S_r(j) = \sum_{s=1}^{20} f_{rs} M_{rs}(j)$$

which is the number of students that would be selected from the j -th institution if all institutions on the frame were to be sampled.

An independent sample of institutions was selected for each institutional stratum using Chromy's sequential probability minimum replacement (pmr) sampling algorithm to select institutions with probabilities proportional to their measures of size (Chromy 1979). However, rather than allow multiple selections of sample institutions, those institutions with expected frequencies of selection greater than unity (1.00) were selected with certainty, and the remainder of the institutional sample was selected from the remaining institutions in each stratum. This process made it unnecessary to select multiple second-stage samples of persons by precluding institutions

with multiple selections at the first stage of sampling. Therefore, the expected frequency of selection for the j -th institution in institutional stratum r is given by

$$\pi_r(j) = \begin{cases} \frac{n_r S_r(j)}{S_r(+)} , & \text{for noncertainty selections;} \\ 1, & \text{for certainty selections;} \end{cases}$$

where

$$S_r (+) = \sum_{j=1}^{J(r)} S_r (j),$$

and n_r is the number of noncertainty selections from stratum r .

Within each of the r institutional types, the type r sampling frame was implicitly stratified by sorting in a serpentine manner (see Williams and Chromy 1980) by the following variables:

- level of for-profit 2-year-or-more institutions;
- historically black colleges and universities (HBCU) indicator;
- Hispanic-serving institution indicator;
- Carnegie classification of postsecondary institutions;
- institution region (from the IPEDS IC file) with Alaska and Hawaii moved to Region 9 with Puerto Rico;
- state and system, for a subset of states; and
- the institution measure of size.

The objective of this additional, implicit stratification was to ensure proportionate representation of institutions across important characteristics.

Procedures for obtaining and sampling from student lists included:

- processing lists on a flow basis as they were received;
- ensuring that each sample institution had at least ten sample students;
- implementing quality assurance checks against the latest IPEDS data; and
- compiling a master sample file on a flow basis as sample students were selected, including student sampling weights.

Student samples were selected as stratified, systematic random samples. The student sampling rates were fixed for each sample institution rather than the student sample sizes:

- to facilitate selecting the samples on a flow basis as the student lists were received from sample institutions; and

- because sampling at a fixed rate based on the overall stratum sampling rate and the institution probabilities of selection results in approximately equal overall probabilities of selection within student strata.

Recall that the overall population sampling rate for student stratum r is given by

$$f_{rs} = m_{rs} / M_{rs}(+) ,$$

where

$$M_{rs}(+) = \sum_{j=1}^{J(r)} M_{rs}(j) .$$

For the unconditional probability of selection to be a constant for all eligible students in stratum r , the overall probability of selection should be the overall student sampling fraction, f_{rs} ; i.e., it was ensured that

$$\frac{m_{rs}(j)}{M_{rs}(j)} \pi_r(j) = f_{rs} ,$$

or equivalently,

$$m_{rs}(j) = f_{rs} \frac{M_{rs}(j)}{\pi_r(j)} .$$

Thus, the conditional sampling rate for stratum r , given selection of the j -th institution, becomes

$$f_{rs|j} = f_{rs} / \pi_r(j) .$$

However, in this case, the desired overall student sample size, m_{rs} , is achieved only in expectation over all possible samples.

Achieving the desired sample sizes with equal probabilities within strata in the particular sample selected and simultaneously adjusting for institutional nonresponse and ineligibility requires that

$$\sum_{j \in R} m_{rs}(j) = m_{rs} ,$$

where R denotes the set of eligible, responding institutions. If the conditional student sampling rate for stratum r in the j -th institution is

$$\hat{f}_{rs|j} = \hat{f}_{rs} / \pi_r(j) ,$$

it is required that

$$\sum_{j \in R} \hat{f}_{rs} \frac{M_{rs}(j)}{\pi_r(j)} = m_{rs}$$

or equivalently,

$$\hat{f}_{rs} = m_{rs} / \hat{M}_{rs} ,$$

where

$$\hat{M}_{rs} = \frac{\sum_{j \in R} M_{rs}(j)}{\pi_r(j)} .$$

Since it was necessary to set the student sampling rates before complete information on eligibility and response status was available, \hat{M}_{rs} was calculated as follows:

$$\hat{M}_{rs} = \sum_{j \in S} \frac{M_{rs}(j)}{\pi_r(j)} * [E_r R_r E_{rs}] ,$$

where S denotes the set of all sample institutions,

E_r = the institutional eligibility factor for institutional stratum r ,

R_r = the institutional response factor for institutional stratum r ,

E_{rs} = the student eligibility factor for student stratum rs .

NPSAS is a multivariate survey with a p -dimensional parameter space, $\theta = \{\theta_f\}, f = 1, \dots, p$, for which it is desired to estimate θ with $\hat{\theta}$ while minimizing cost (sample size) subject to a series of precision requirements. Consequently, optimal sampling rates can be obtained by solving the following nonlinear optimization problem:

$$\text{Minimize: } C = C_0 + \sum_{r=1}^{46} n_r C_r + \sum_{r=1}^{46} \sum_{s=1}^{20} n_r n_{rs} C_{rs}$$

$$\text{Subject to: } \begin{cases} V(\hat{\theta}_f) \leq v_f, \forall f \\ 2 \leq n_r \leq N_r, r \in [1, 46] \\ 2 \leq n_{rs} \leq N_{rs}, s \in [1, 20] \end{cases}$$

where,

C_0 = fixed cost not affected by changes in the numbers of institutions or students selected;

C_r = variable cost per institution, depending on the number of participating institutions in the r -th institutional stratum;

n_r = number of participating institutions in the r -th stratum;

C_{rs} = variable cost per student, depending on the number of participating students in student stratum rs ; and

n_{rs} = number of participating students in student stratum rs .

In the above, variance constraints $V(\hat{\theta}_f) \leq v_f$ correspond to precision requirements that were specified for key survey estimates. Using data from NPSAS:04 and NPSAS:00 (for

baccalaureate recipient constraints), all of the required variance components and their associated precision constraints were developed. Subsequently, the resulting nonlinear optimization problem to determine the most effective sample allocation was solved using Chromy's algorithm (Chromy 1987) to obtain feasible solutions to the above problem.

The sample size for NPSAS:08 is larger than that for past NPSAS studies. The first reason for the increased sample size was to ensure sufficient yield for analytic purposes. The sample size was designed so that respondent yield would be sufficient for analyses even if actual response rates were lower than the targeted rates. Second, the NPSAS:08 sample was augmented to include representative samples of ACG and SMART Grant recipients. Third, as previously mentioned, NPSAS:08 includes state-representative undergraduate student samples for four types of institutions (public 2-year; public 4-year; private, not-for-profit 4-year; and private, for-profit, degree-granting) in six states. A larger overall sample size was necessary to achieve state-representative samples in addition to the nationally representative sample. The study was designed to ensure adequate sample sizes for the domains of interest.

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Appendix B

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Appendix C

Data Elements for Student Interview

Table 1. Data elements for student interview

Data element	Applies to	Purpose/issues	New items
B&B eligibility			
Confirm received bachelor's degree or completed requirements between July 1, 2007 and June 30, 2008?	All	Eligibility confirmation	
Date received bachelor's (month and year)	All	Eligibility confirmation	
Undergraduate enrollment history			
Institution granting the degree (confirm NPSAS or add code on-line)	All	Path/time to degree	
Term and year first began undergraduate education	All		
Undergraduate enrollment at other institutions between high school and bachelor's degree	All		
Names of other colleges attended (on-line coding) (up to 6)	Attended multiple		
Terms/years attended other colleges	Attended multiple		
Degree program and degrees attained at other colleges	Attended multiple		
Class level at other colleges	Attended multiple		
Previous educational attainment prior to bachelor's (previous certificate, associate's, bachelor's, other) at NPSAS	NPSAS non-respondents		
Dates of NPSAS attendance (month and year)	All		
Continuous enrollment for bachelor's degree	All		
Reasons for enrollment gaps	Stopouts		
Reasons for attending a 2-year college	Attended a 2-year		
Original major at NPSAS	NPSAS non-respondents		
Number of times changed major	NPSAS non-respondents		
Final major at NPSAS	NPSAS non-respondents		
Transfer or multiple enrollment (transfer/multiple enrollment/both)	Attended multiple		
Credits attempted to transfer/were accepted from other colleges	Attended multiple		
Performance			
Withdrew from any course because failing	All		
Repeated any course to improve grade	All		
Received any incompletes	All		
Ever on academic probation	All		
Graduated with academic honors	All		
Ever on Dean's list	All		New
Undergraduate student loan debt			
Loan type	Borrowers		
Amount borrowed	Borrowers		
Amount owed	Borrowers		
Currently repaying student loans	Borrowers		
Amount of monthly payments	Repaying		

See notes at end of table.

Table 1. Data elements for student interview—Continued

Data element	Applies to	Purpose/issues	New items
Parents helping to repay the loans	Repaying		
Reasons not repaying	Borrowers not repaying		
Deferment reason	Borrowers not repaying		
Participation in loan forgiveness program	Borrowers		
Has the debt influenced career plans	Borrowers		
Consider the student loan debt a worthwhile investment	Borrowers		
Assessment of education			
Undergraduate education was worth cost	All		
Satisfaction with quality of education from NPSAS	All		
Satisfaction with undergraduate major choice	All		
Current status (at time of interview)	All	Labor market outcomes	
Working for pay at a full-time or part-time job			
Taking courses toward a graduate or professional degree or postbaccalaureate certificate			
Taking courses toward an undergraduate degree or certificate			
Taking other courses, not for a formal award			
Serving on active duty in the armed forces			
Keeping house (full-time homemaker)			
Holding a job but on temporary layoff from work or waiting to report to work			
Looking for work			
Traveling			
Disabled			
Volunteering (Peace Corps, VISTA)			
Post-baccalaureate enrollment			
Enrolled since earning bachelor's degree	All		
Enrolled for degree/certificate	Enrolled		
When first enrolled for postbaccalaureate degree/certificate	Enrolled for degree/certificate		
Name of institution attending (on-line coding)	Enrolled for degree/certificate		
Currently enrolled	Enrolled for degree/certificate		
Degree type	Enrolled for degree/certificate		
Degree program/field of study (on-line coding)	Enrolled for degree/certificate		
Attendance status	Enrolled for degree/certificate		
When completed/expect to complete program	Enrolled for degree/certificate		
Type of financial aid received	Enrolled for degree/certificate		
Receiving any employer aid to support post-baccalaureate education	Enrolled for degree/certificate and working		
Number of hours worked per week while enrolled	Enrolled for degree/certificate and working		
Consider yourself primarily an employee or student	Enrolled for degree/certificate and working		

See notes at end of table.

Table 1. Data elements for student interview—Continued

Data element	Applies to	Purpose/issues	New items
Plans for future enrollment in degree/certificate program			
Taken GRE or other graduate/first professional entrance exam	All		
Other coursetaking (nondegree)			
Enrolled in any nondegree coursework	All		New
Reasons for taking courses	Enrolled in nondegree coursework		
Employment at time of interview			
Date began job			
Employed full-time or part-time			
Prefer to have a full-time job	Employed part-time		
Number of jobs held currently	Employed		
Number of jobs held since graduation			
Type of occupation (on-line coding)			
Type of duties (specify)			
Type of industry (on-line coding)			
Type of firm			
Salary (indicate per time period)			
Average number of hours per week worked			
Self-employed			
Related to undergraduate major			
Job part of career path			
Difficult to get hired	On career path		New
Type of non-career job	Not on career path		
Job satisfaction			
Compensation	Employed	Labor market outcomes	
Importance and challenge			
The job as a whole			
Benefits			
Medical and/or other health insurance (dental, vision, etc.)	Employed	Labor market outcomes	
Life insurance			
Retirement or other financial benefits, such as 401(k)/403(b)			
Other			
Job search			
Looking for work	All		
Employed since earning bachelor's	All		
Employment status by month			
July 2007 (working/looking for work)			
August 2007 (working/looking for work)			

See notes at end of table.

Table 1. Data elements for student interview—Continued

Data element	Applies to	Purpose/issues	New items
September 2007 (working/looking for work)			
October 2007 (working/looking for work)			
November 2007 (working/looking for work)			
December 2007 (working/looking for work)			
January 2008 (working/looking for work)			
February 2008 (working/looking for work)			
March 2008 (working/looking for work)			
April 2008 (working/looking for work)			
May 2008 (working/looking for work)			
June 2008 (working/looking for work)			
July 2008 (working/looking for work)			
August 2008 (working/looking for work)			
September 2008 (working/looking for work)			
October 2008 (working/looking for work)			
November 2008 (working/looking for work)			
December 2008 (working/looking for work)			
January 2009 (working/looking for work)			
February 2009 (working/looking for work)			
March 2009 (working/looking for work)			
April 2009 (working/looking for work)			
May 2009 (working/looking for work)			
June 2009 (working/looking for work)			
July 2009 (working/looking for work)			
August 2009 (working/looking for work)			
September 2009 (working/looking for work)			
Current demographics			
Date of birth	NPSAS non-respondents	Background information for analyses of debt/teaching/other employment	
Citizenship status (citizen, permanent resident, other)	NPSAS non-respondents and non-citizens in NPSAS		
Current state of legal residence	All		
Live more than 50 miles from NPSAS institution	All		
Live more than 50 miles from where attended high school	All		
Household composition	All		
Marital status (never married/married/separated/divorced/partner)	All		
Number of dependent children	All		
Age of youngest dependent child	Have children		
Employment/enrollment status of spouse/partner	Have spouse/partner		
Income/debt of spouse/partner	Have spouse/partner		
Income in 2008	All		
Type of disability	All		
Main disability	Disabled		

See notes at end of table.

Table 1. Data elements for student interview—Continued

Data element	Applies to	Purpose/issues	New items
Native language	All		New
Other language	All		New
Language coursetaking	Know a non-English language		New
Non-English language use during childhood	Know a non-English language		New
Use of non-English language	Know a non-English language		New
Proficiency in non-English language	Know a non-English language		New
Assets and debt			
Own home or rent	All	Debt and finances	
Monthly mortgage/rent amount	All		
Own any motor vehicles	All		
Monthly auto payments	Vehicle owners		
Impact of recession on enrollment and employment decisions	All		New
Civic and volunteer activity			
Registered to vote in U.S.	U.S. citizens		
Voted in any election	U.S. citizens		
Military status (veteran, active, reserves, none)	All		
Perform any community service/volunteer work in last year	All		
Types of service and time commitment	All		
Volunteer hours per month	Volunteers		
Future plans to volunteer	Volunteers		
Identifying prospective teacher pipeline members			
Teaching experience at K-12 level	All	Screen for K–12 teaching pipeline	
Prepared for teaching	All who hadn't taught		
Considering teaching	All who hadn't taught or prepared		
Teaching experiences			
Types of teaching positions held since NPSAS school: regular, short-term substitute, long-term substitute, teacher's aide, support, itinerant, student teacher	All who had taught	Identify K-12 teachers (those who had regular, long-term substitute, support, or itinerant positions in a public or private K-12 school)	
Number of schools/districts held teaching positions since NPSAS school			
For types held, month/year when first taught		Teaching career paths	
Participated in teacher internship program	K-12 teachers	Teaching career paths	
For each school/district (not including teacher's aide, short-term substitute, or student teaching jobs)	K-12 teachers	Teaching career paths	
Type of teaching job (regular, long-term substitute, support, itinerant)			
Start and end date			
Number of schools at which taught in this job			
See notes at end of table.			

Table 1. Data elements for student interview—Continued

Data element	Applies to	Purpose/issues	New items
School(s) where taught (CCD/PSS coder)			
Sector and level of school	If school not in coder		
County and district of school for itinerant position	Itinerant teachers		
Whether participated in a formal induction program (first job only)			
Grades taught			
Subject areas taught			
Whether prepared to teach all subjects taught			
Whether taught full or part-time			
Academic year base salary and other compensation			
Why did you leave that school/district?			
Degree of preparation for first teaching position	K-12 teachers	Teaching career paths	
Support from school or district in first teaching job	K-12 teachers	Teaching career paths	
Satisfaction with aspects of teaching	K-12 teachers	Teaching career paths	
Certification and preparation		Teacher education/ training, teaching career paths	
Currently certified to teach in any of grades K-12 in any state?	Ever certified		
Type of certification	Ever certified		
Date first certified (month, year)	Ever certified		
Field(s) in which certified	Ever certified		
Completed or completing student teaching or teacher practicum	No regular certification or not teacher education majors		
Taken or taking courses towards certification	Prepared but never certified		
Teaching job applications			
Applied for teaching jobs since completing degree	Not taught, but had prepared or were currently considering	Teaching career paths	
Received any offers?	Applied		
Reasons for not applying for a teaching position	Did not apply		
Do you have any plans to move into or continue in a non teaching job in elementary or secondary education?	Taught, prepared, or were currently considering	Teaching career paths	
Plan to teach in future	Teacher education majors who said no to screeners 1 and 3 and had neither applied nor taught since graduation		
Loan forgiveness program awareness and participation	All who taught, prepared, or are currently considering	Loan forgiveness programs	
Locating information	All	Tracing for next follow-up	

NOTE: NPSAS = National Postsecondary Student Aid Study. GRE = Graduate Records Examination. CCD = Common Core of Data. PSS = Private School Universe Survey
 SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Appendix D

Facsimile of Full-scale Instrument

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Section A: Eligibility

ZRID

Student identification number

B&B:08/09 student identification number

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

SUMSTFLG

Interview completion flag

SUMSTFLG indicates the type of interview completion.

If SUMSTAT = 295 then SUMSTFLG = 1(Full complete student interview)

else if SUMSTAT = 290 then SUMSTFLG = 2(Partial student interview)

else if SUMSTAT = 293 then SUMSTFLG =

3(Completed abbreviated English interview)

else if SUMSTAT = 294 then SUMSTFLG =

4(Completed abbreviated Spanish interview)

1 = Completed full student interview

2 = Partial student interview

3 = Completed abbreviated English interview

4 = Completed abbreviated Spanish interview

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

COMPDATE

Date interview completed

COMPDATE is provided in the YYYYMMDD format.

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

COMPMODE

Interview completion mode

CATI stands for Computer Assisted Telephone Interview. Respondents in this interview mode completed the interview over the phone with a telephone interviewer. CAPI stands for Computer Assisted Personal Interview. Respondents in this interview mode were contacted by field interviews to complete the student interview. The field interviewers conducted CAPI interviews both over the telephone and in person.

0 = Web

1 = CATI

2 = CAPI, unknown mode

3 = CAPI, in-person

4 = CAPI, by phone

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RAELIG

NPSAS enrollment between July 1, 2007 and June 30, 2008

Were you enrolled at [NPSAS] at any time between July 1, 2007 and June 30, 2008?

0 = No

1 = Yes

Applies to: All respondents.

Recode note: If 200707 <= [last date of NPSAS enrollment prior to July 1, 2008] <= 200806 then RAELIG = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RADEGREE

Degree during last term of enrollment at NPSAS in 2007–08 year

What degree or certificate were you working on during your last term of enrollment at [NPSAS] in the 2007–08 school year (July 1, 2007 - June 30, 2008)? (We will ask you about any more recent enrollment at [NPSAS] later in the survey.)

1 = 4-year bachelor's degree

2 = 5-year bachelor's degree (also awarded by a 4-year college or university, but generally requires 5 years of full-time, college-level work)

3 = Associate's degree

4 = Undergraduate certificate or diploma

5 = Undergraduate, not enrolled in a degree program

6 = Post-baccalaureate certificate

7 = Master's degree

8 = Post-master's certificate

9 = Professional degree (only includes the following degree programs: chiropractic, dentistry, law, medicine, optometry, osteopathic medicine, pharmacy, podiatry, ministry or divinity, or veterinary medicine)

10 = Doctoral degree

11 = Graduate, not enrolled in a degree program

12 = Multiple degrees in the 2007–08 school year

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RAMULTDG

Working on bachelor's at NPSAS between July 1, 2007 and June 30, 2008

Were you working on a bachelor's degree at [NPSAS] at any time during the 2007–08 school year?

1 = Yes

Applies to: Respondents who indicated working on a degree at NPSAS other than a bachelor's.

Instrument code: RADEGREE not in (1 2)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RAREQ

Completed bachelor's between July 1, 2007 and June 30, 2008

Did you complete the requirements for a bachelor's degree while you were enrolled at [NPSAS] during the 2007–08 school year (July 1, 2007 - June 30, 2008)? (The date when you completed your requirements and the date when you were awarded your degree may be different.)

0 = No

1 = Yes

Applies to: All respondents.

Recode note: If [completed bachelor's degree requirements from NPSAS between July 1, 2007 and June 30, 2008] then RAREQ = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RAAWRDMY

Date awarded bachelor's degree from NPSAS

In what month and year were you awarded your bachelor's degree from [NPSAS]? Please select both a month and a year from the dropdowns.

RAAWRDMY is provided in the YYYYMM format.

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

Section B: Undergraduate Education

RBNFST

NPSAS first school enrolled in after high school

Was [NPSAS] the first college, university, or trade school you enrolled in after completing your high school requirements?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBFTMY

Date first attended any college

[If COMPMODE = 0]

In what month and year did you first attend any college, university, or trade school after completing your high school requirements? (Please select both a month and a year from the dropdowns.)

[else]

In what month and year did you first attend any college, university, or trade school after completing your high school requirements?

RBFTMY is provided in the YYYYMM format. Dates after December 2005 were replaced with a -6 to indicate the date was out of range.

Applies to: Respondents whose first college enrollment after high school was at a school other than NPSAS.

Instrument code: RBNFST ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPBM

Date first enrolled at NPSAS for bachelor's degree

In what month and year were you first enrolled at [NPSAS] for your bachelor's degree?

RBNPBM is provided in the YYYYMM format. Dates after June 2008 were replaced with a -6 to indicate the date was out of range.

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPMJCH

Ever formally changed major at NPSAS

Since first declaring a major at [NPSAS], did you ever formally change it?

0 = No

1 = Yes

Applies to: All respondents.

Recode note: 1) If [preloaded change in major from NPSAS:08 FS] then RBNPMJCH = 1

2) If [no preloaded change in major from NPSAS:08 FS] then RBNPMJCH = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPCHNM

Frequency of formal major change at NPSAS

[If preloaded change in major from NPSAS:08 FS] Our records indicate that you formally changed your major at [NPSAS]. At [NPSAS] did you change your major...

[else]

At [NPSAS] did you change your major...

1 = Once

2 = More than once

3 = Did not formally change major at [NPSAS]

Applies to: Respondents who formally changed their major at NPSAS and had no preloaded number of changes in major from NPSAS.

Instrument code: RBNPMJCH = 1 and [no preloaded number of changes in major from NPSAS:08 FS] Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBORGMAJ

NPSAS original major: string

[If COMPMODE = 0]

What was your original declared major at [NPSAS] for your bachelor's degree? Please type your original declared major in the box provided and then click the "Search for Major" button. A list of categories that match your entry will be displayed.

[else]

What was your original declared major at [NPSAS] for your bachelor's degree? Please bear with me while I code this.

Applies to: Respondents who had no preloaded original declared major and had a formal change in major at the NPSAS school (indicated either in a preload or in the instrument).

Instrument code: [no preloaded original declared major from NPSAS:08 FS] and ([preloaded number of changes in major from NPSAS:08 FS] or RBNPCHNM in (1 2)) Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBOMJGEN

NPSAS original major: general CIP code

[If COMPMODE = 0]

What was your original declared major at [NPSAS] for your bachelor's degree? Please type your original declared major in the box provided and then click the "Search for Major" button. A list of categories that match your entry will be displayed.

[else]

What was your original declared major at [NPSAS] for your bachelor's degree? Please bear with me while I code this.

The 2010 Classification of Instructional Programs (CIP) was used to code these data. See

<http://nces.ed.gov/ipeds/cipcode/> for more information on the CIP.

- 1 = Agriculture/operations/related sciences
- 3 = Natural resources and conservation
- 4 = Architecture and related services
- 5 = Area/ethnic/cultural/gender/grp studies
- 9 = Communication, journalism, related
- 10 = Communication technology and support
- 11 = Computer/information science/support
- 12 = Personal and culinary services
- 13 = Education
- 14 = Engineering
- 15 = Engineering technologies/related fields
- 16 = Foreign languages/literature/linguistics
- 19 = Family/consumer sciences/human sciences
- 22 = Legal professions and studies
- 23 = English language and literature/letters
- 24 = Liberal arts/sci/gen studies/humanities
- 25 = Library science
- 26 = Biological and biomedical sciences
- 27 = Mathematics and statistics
- 28 = Military sci/leadership/operational art
- 29 = Military technologies/applied sciences
- 30 = Multi/interdisciplinary studies
- 31 = Parks/recreation/leisure/fitness studies
- 38 = Philosophy and religious studies
- 39 = Theology and religious vocations
- 40 = Physical sciences
- 41 = Science technologies/technicians
- 42 = Psychology
- 43 = Homeland security/law enforce/protective
- 44 = Public administration/social service
- 45 = Social sciences
- 46 = Construction trades
- 47 = Mechanic/repair technologies/technicians
- 48 = Precision production
- 49 = Transportation and materials moving
- 50 = Visual and performing arts
- 51 = Health professions and related programs
- 52 = Business/management/marketing/related
- 54 = History
- 60 = Residency programs

Applies to: Respondents who had no preloaded original declared major and had a formal change in major at the NPSAS school (indicated either in a preload or in the instrument).

Instrument code: [no preloaded original declared major from NPSAS:08 FS] and ([preloaded number of changes in major from NPSAS:08 FS] or RBNPCHNM in (1 2)) Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBOMJSPE

NPSAS original major: specific CIP code

[If COMPMODE = 0]

What was your original declared major at [NPSAS] for your bachelor's degree? Please type your original declared major in the box provided and then click the "Search for Major" button. A list of categories that match your entry will be displayed.

[else]

What was your original declared major at [NPSAS] for your bachelor's degree? Please bear with me while I code this.

The 2010 Classification of Instructional Programs (CIP) was used to code these data. See

<http://nces.ed.gov/ipeds/cipcode/> for more information on the CIP.

- 01.0000 = Agriculture, general
- 01.0901 = Animal sciences, general
- 03.0104 = Environmental science
- 03.9999 = Natural resources/conservation, other
- 04.0201 = Architecture
- 04.0401 = Environmental design/architecture
- 05.0299 = Ethnic/minority/gender studies, other
- 09.0100 = Communication, general
- 09.0102 = Mass communication/media studies
- 09.0401 = Journalism
- 09.0402 = Broadcast journalism
- 09.0404 = Photojournalism
- 09.0499 = Journalism, other
- 09.0702 = Digital communication/media/multimedia
- 09.0900 = Public relations/advertising
- 09.0903 = Advertising
- 09.0999 = Public relations/advertising, other
- 10.0202 = Radio and television broadcasting tech
- 10.0203 = Recording arts technology/technician
- 10.0304 = Animation/interactive tech/video graphic
- 11.0101 = Computer and info sciences, general
- 11.0103 = Information technology
- 11.0201 = Computer programming/programmer, general
- 11.0701 = Computer science
- 11.0801 = Web page, digital/multimedia/design
- 11.0803 = Computer graphics
- 11.0901 = Computer systems networking/telecomm

Appendix D. Facsimile of Full-scale Instrument—Section B. Undergraduate Education

11.1002 = System, networking, LAN/WAN management	23.0101 = English language and literature, general
11.1004 = Web/multimedia management/webmaster	23.1401 = General literature
11.1099 = Computer/info tech services admin/mgmt	23.9999 = English lang/literature/letters, other
11.9999 = Computer/info sci/support services, other	24.0101 = Liberal arts/sciences/liberal studies
12.0509 = Culinary science/culinology	24.0102 = General studies
13.0101 = Education, general	24.0103 = Humanities/humanistic studies
13.0201 = Bilingual and multilingual education	24.0199 = Liberal arts/sci, general studies, other
13.0401 = Educational leadership/admin, general	26.0101 = Biology/biological sciences, general
13.1001 = Special education and teaching, general	26.0102 = Biomedical sciences, general
13.1007 = Ed/teaching indiv with mult disabilities	26.0202 = Biochemistry
13.1017 = Ed/teaching elementary special ed	26.0204 = Molecular biology
13.1202 = Elementary education and teaching	26.0407 = Cell biology and anatomy
13.1205 = Secondary education and teaching	26.0499 = Cell/cellular bio/anatomical sci, other
13.1210 = Early childhood education/teaching	26.0502 = Microbiology, general
13.1302 = Art teacher education	26.0599 = Microbiological sci/immunology, other
13.1303 = Business teacher education	26.0701 = Zoology/animal biology
13.1305 = English/language arts teacher education	26.0709 = Wildlife biology
13.1307 = Health teacher education	26.0799 = Zoology/animal biology, other
13.1311 = Mathematics teacher education	26.0801 = Genetics, general
13.1312 = Music teacher education	26.0908 = Exercise physiology
13.1314 = Physical education teaching and coaching	26.1201 = Biotechnology
13.1318 = Social studies teacher education	26.1302 = Marine biology/biological oceanography
13.1328 = History teacher education	26.1501 = Neuroscience
13.1330 = Spanish language teacher education	26.9999 = Biological/biomedical sciences, other
14.0101 = Engineering, general	27.0101 = Mathematics, general
14.0102 = Pre-engineering	27.0199 = Mathematics, other
14.0201 = Aerospace/aeronautical/space engineering	27.0301 = Applied mathematics, general
14.0401 = Architectural engineering	27.0305 = Financial mathematics
14.0501 = Bioengineering/biomedical engineering	30.0000 = Multi/interdisciplinary studies, general
14.0901 = Computer engineering, general	30.0601 = Systems science and theory
14.1001 = Electric/electronics/comm engineering	30.1801 = Natural sciences
14.1099 = Electric/electronics/comm engin, other	30.2301 = Multi/intercultural/diversity studies
14.1401 = Environmental/envirom health engineering	30.2701 = Human biology
14.1801 = Materials engineering	30.3201 = Marine sciences
14.1901 = Mechanical engineering	31.0504 = Sport and fitness administration/mgmt
14.3501 = Industrial engineering	31.0505 = Kinesiology and exercise science
15.0303 = Electrical/electronic/comm engin tech	38.0101 = Philosophy
15.0805 = Mechanical engineering/mechanical tech	38.0201 = Religion/religious studies
16.0101 = Foreign languages/literatures, general	39.0201 = Bible/biblical studies
16.0102 = Linguistics	39.0301 = Missions/missionary studies/missiology
16.0905 = Spanish language and literature	39.0799 = Pastoral counseling/ministries, other
16.1603 = Sign language interpretation/translation	40.0202 = Astrophysics
19.0299 = Family/consumer sci/human sci bus, other	40.0404 = Meteorology
19.0706 = Child development	40.0501 = Chemistry, general
19.0707 = Family and community services	40.0504 = Organic chemistry
19.0901 = Apparel and textiles, general	40.0510 = Forensic chemistry
22.0000 = Legal studies, general	40.0599 = Chemistry, other
22.0001 = Pre-law studies	40.0801 = Physics, general
22.0101 = Law	40.9999 = Physical sciences, other
22.0302 = Legal assistant/paralegal	41.0101 = Biology tech/biotechnology lab tech
	41.9999 = Science technologies/technicians, other
	42.0101 = Psychology, general
	42.2703 = Developmental and child psychology
	42.2706 = Physiological psychology/psychobiology
	42.2805 = School psychology
	43.0103 = Criminal justice/law enforcement admin
	43.0104 = Criminal justice/safety studies

Appendix D. Facsimile of Full-scale Instrument—Section B. Undergraduate Education

- 43.0106 = Forensic science and technology
 43.0107 = Criminal justice/police science
 43.0112 = Securities services administration/mgmt
 43.0199 = Corrections and criminal justice, other
 44.0000 = Human services, general
 44.0701 = Social work
 45.0101 = Social science, general
 45.0201 = Anthropology
 45.0401 = Criminology
 45.0601 = Economics, general
 45.0701 = Geography
 45.0901 = International relations/affairs
 45.1001 = Political science/government, general
 45.1101 = Sociology
 45.1201 = Urban studies/affairs
 45.9999 = Social sciences, other
 47.0604 = Automotive mechanics tech/technician
 50.0401 = Design/visual communications, general
 50.0407 = Fashion/apparel design
 50.0409 = Graphic design
 50.0410 = Illustration
 50.0501 = Drama/dramatics/theatre arts, general
 50.0502 = Technical theatre/design/technology
 50.0599 = Dramatic/theatre arts/stage-craft, other
 50.0601 = Film/cinema/video studies
 50.0602 = Cinematography and film/video production
 50.0699 = Film/video and photographic arts, other
 50.0701 = Art/art studies, general
 50.0702 = Fine/studio arts, general
 50.0708 = Painting
 50.0904 = Music theory and composition
 50.0912 = Music pedagogy
 50.0999 = Music, other
 50.1003 = Music management
 50.1099 = Arts, entertainment, media mgmt, other
 51.0000 = Health services/allied health, general
 51.0001 = Health and wellness, general
 51.0201 = Communication science/disorders, general
 51.0602 = Dental hygiene/hygienist
 51.0701 = Health/health care administration/mgmt
 51.0806 = Physical therapy technician/assistant
 51.0912 = Physician assistant
 51.0913 = Athletic training/trainer
 51.1099 = Clinical/medical lab/allied prof, other
 51.1101 = Pre-dentistry studies
 51.1102 = Pre-medicine/pre-medical studies
 51.1103 = Pre-pharmacy studies
 51.1104 = Pre-veterinary studies
 51.1105 = Pre-nursing studies
 51.1107 = Pre-occupational therapy studies
 51.1109 = Pre-physical therapy studies
 51.1201 = Medicine
 51.1501 = Substance abuse/addiction counseling
 51.2001 = Pharmacy
 51.2206 = Occupational health/industrial hygiene
 51.2306 = Occupational therapy/therapist
 51.2308 = Physical therapy/therapist
 51.2311 = Kinesiotherapy/kinesiotherapist
 51.2401 = Veterinary medicine (DVM)
 51.2599 = Veterinary biomed/clinical sci, other
 51.3101 = Dietetics/dietitian
 51.3102 = Clinical nutrition/nutritionist
 51.3801 = Nursing/registered nurse
 52.0101 = Business/commerce, general
 52.0201 = Business admin and management, general
 52.0205 = Operations management and supervision
 52.0299 = Business/managerial operations, other
 52.0301 = Accounting
 52.0304 = Accounting and finance
 52.0305 = Accounting and business/management
 52.0401 = Admin asst/secretarial sciences, general
 52.0407 = Business/office automation/data entry
 52.0701 = Entrepreneurship/entrepreneurial studies
 52.0799 = Entrepreneurial and small bus ops, other
 52.0801 = Finance, general
 52.0909 = Hotel, motel, and restaurant management
 52.1001 = Human resources mgmt/pers admin, general
 52.1101 = International business/trade/commerce
 52.1201 = Management information systems, general
 52.1401 = Marketing/marketing management, general
 52.1902 = Fashion merchandising
 52.2101 = Telecommunications management
 52.9999 = Business, management, marketing, other
 54.0101 = History, general
- Applies to: Respondents who had no preloaded original declared major and had a formal change in major at the NPSAS school (indicated either in a preload or in the instrument).*
 Instrument code: [no preloaded original declared major from NPSAS:08 FS] and ([preloaded number of changes in major from NPSAS:08 FS] or RBNPCHNM in (1 2))
 Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.
 Source: B&B:08/09 full scale student interview
- RBDBLMAJ**
Double major at NPSAS
 Did you have a double major at [NPSAS]?
 0 = No
 1 = Yes
- Applies to: All respondents.*
 Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.
 Source: B&B:08/09 full scale student interview

RBNPMAJ

NPSAS primary major: string

[If (RBNPMJCH > 0 or [preloaded change in major from NPSAS:08 FS]) and RBDBLMA] = 1]

What was your final major at [NPSAS] for your bachelor's degree?

Since you double-majored, please indicate only one major here. You will have an opportunity next to provide your other major.

[else if RBNPMJCH > 0 or [preloaded change in major from NPSAS:08 FS]]

What was your final major at [NPSAS] for your bachelor's degree?

[else if COMPMODE = 0]

What was your major at [NPSAS] for your bachelor's degree?

Please type your major in the box provided and then click the "Search for Major" button. A list of categories that match your entry will be displayed.

[else]

What was your major at [NPSAS] for your bachelor's degree? Please bear with me while I code this.

Applies to: Respondents who either did not have a double major at the NPSAS school and had no preloaded primary major, or who had a double major at the NPSAS school and had no preloaded primary or second major.

Instrument code: (RBDBLMA] = 0 and [no preloaded primary major from NPSAS:08 FS]) or (RBDBLMA] ne 0 and [no preloaded primary or second major from NPSAS:08 FS])

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPMGEN

NPSAS primary major: general CIP code

[If (RBNPMJCH > 0 or [preloaded change in major from NPSAS:08 FS]) and RBDBLMA] = 1]

What was your final major at [NPSAS] for your bachelor's degree?

Since you double-majored, please indicate only one major here. You will have an opportunity next to provide your other major.

[else if RBNPMJCH > 0 or [preloaded change in major from NPSAS:08 FS]]

What was your final major at [NPSAS] for your bachelor's degree?

[else if COMPMODE = 0]

What was your major at [NPSAS] for your bachelor's degree?

Please type your major in the box provided and then click the "Search for Major" button. A list of categories that match your entry will be displayed.

[else]

What was your major at [NPSAS] for your bachelor's degree? Please bear with me while I code this.

The 2010 Classification of Instructional Programs (CIP) was used to code these data. See <http://nces.ed.gov/ipeds/cipcode/> for more information on the CIP.

- 1 = Agriculture/operations/related sciences
- 3 = Natural resources and conservation
- 4 = Architecture and related services
- 5 = Area/ethnic/cultural/gender/grp studies
- 9 = Communication, journalism, related
- 10 = Communication technology and support
- 11 = Computer/information science/support
- 12 = Personal and culinary services
- 13 = Education
- 14 = Engineering
- 15 = Engineering technologies/related fields
- 16 = Foreign languages/literature/linguistics
- 19 = Family/consumer sciences/human sciences
- 22 = Legal professions and studies
- 23 = English language and literature/letters
- 24 = Liberal arts/sci/gen studies/humanities
- 25 = Library science
- 26 = Biological and biomedical sciences
- 27 = Mathematics and statistics
- 28 = Military sci/leadership/operational art
- 29 = Military technologies/applied sciences
- 30 = Multi/interdisciplinary studies
- 31 = Parks/recreation/leisure/fitness studies
- 38 = Philosophy and religious studies
- 39 = Theology and religious vocations
- 40 = Physical sciences
- 41 = Science technologies/technicians
- 42 = Psychology
- 43 = Homeland security/law enforce/protective
- 44 = Public administration/social service
- 45 = Social sciences
- 46 = Construction trades
- 47 = Mechanic/repair technologies/technicians
- 48 = Precision production
- 49 = Transportation and materials moving
- 50 = Visual and performing arts
- 51 = Health professions and related programs
- 52 = Business/management/marketing/related
- 54 = History
- 60 = Residency programs

Applies to: Respondents who either did not have a double major at the NPSAS school and had no preloaded primary major, or who had a double major at the NPSAS school and had no preloaded primary or second major.

Instrument code: (RBDBLMA] = 0 and [no preloaded primary major from NPSAS:08 FS]) or (RBDBLMA] ne 0 and [no preloaded primary or second major from NPSAS:08 FS])

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPMSPE

NPSAS primary major: specific CIP code

[If (RBNPMJCH > 0 or [preloaded change in major from NPSAS:08 FS]) and RBDBLMA] = 1]

What was your final major at [NPSAS] for your bachelor's degree?

Since you double-majored, please indicate only one major here. You will have an opportunity next to provide your other major.

[else if RBNPMJCH > 0 or [preloaded change in major from NPSAS:08 FS]]

What was your final major at [NPSAS] for your bachelor's degree?

[else if COMPMODE = 0]

What was your major at [NPSAS] for your bachelor's degree?

Please type your major in the box provided and then click the "Search for Major" button. A list of categories that match your entry will be displayed.

[else]

What was your major at [NPSAS] for your bachelor's degree? Please bear with me while I code this.

The 2010 Classification of Instructional Programs (CIP) was used to code these data. See

<http://nces.ed.gov/ipeds/cipcode/> for more information on the CIP.

- 01.0101 = Agricultural business and mgmt, general
- 01.0102 = Agribusiness/agricultural bus operations
- 01.0103 = Agricultural economics
- 01.0603 = Ornamental horticulture
- 01.0802 = Agricultural communication/journalism
- 01.0999 = Animal sciences, other
- 03.0103 = Environmental studies
- 03.0104 = Environmental science
- 03.0207 = Natural resource recreation and tourism
- 03.0501 = Forestry, general
- 03.0502 = Forest sciences and biology
- 03.0601 = Wildlife, fish/wildlands sci/management
- 04.0201 = Architecture
- 04.0301 = City/urban, community/regional planning
- 04.0401 = Environmental design/architecture
- 04.0601 = Landscape architecture
- 04.0901 = Architectural technology/technician
- 05.0105 = Russian, Eurasian, and related studies
- 05.0107 = Latin American studies
- 05.0130 = Spanish and Iberian studies
- 05.0200 = Ethnic studies
- 05.0202 = American Indian/Native American studies
- 05.0203 = Hispanic-American, Chicano studies
- 05.0207 = Women's studies
- 09.0100 = Communication, general
- 09.0101 = Speech communication and rhetoric
- 09.0102 = Mass communication/media studies
- 09.0199 = Communication/media studies, other
- 09.0401 = Journalism

- 09.0402 = Broadcast journalism
- 09.0404 = Photojournalism
- 09.0701 = Radio and television
- 09.0702 = Digital communication/media/multimedia
- 09.0799 = Radio/television/digital commun, other
- 09.0900 = Public relations/advertising
- 09.0901 = Organizational communication, general
- 09.0902 = Public relations/image management
- 09.0903 = Advertising
- 09.0906 = Sports communication
- 09.0908 = Technical and scientific communication
- 09.0999 = Public relations/advertising, other
- 09.9999 = Communication/journalism/related, other
- 10.0105 = Communications technology/technician
- 10.0202 = Radio and television broadcasting tech
- 10.0299 = Audiovisual communications tech, other
- 10.0301 = Graphic communications, general
- 10.0304 = Animation/interactive tech/video graphic
- 10.0399 = Graphic communications, other
- 11.0101 = Computer and info sciences, general
- 11.0103 = Information technology
- 11.0104 = Informatics
- 11.0199 = Computer and information science, other
- 11.0201 = Computer programming/programmer, general
- 11.0501 = Computer systems analyst/analysis
- 11.0701 = Computer science
- 11.0801 = Web page, digital/multimedia/design
- 11.0803 = Computer graphics
- 11.0901 = Computer systems networking/telecomm
- 11.1002 = System, networking, LAN/WAN management
- 11.1003 = Computer/info systems security/assurance
- 11.1005 = Information technology project mgmt
- 11.1099 = Computer/info tech services admin/mgmt
- 11.9999 = Computer/info sci/support services, other
- 12.0504 = Restaurant, culinary, and catering mgmt
- 12.0507 = Food srvc, waiter/waitress, dining mgmt
- 13.0101 = Education, general
- 13.0201 = Bilingual and multilingual education
- 13.1001 = Special education and teaching, general
- 13.1006 = Ed/teaching indiv w mental retardation
- 13.1007 = Ed/teaching indiv with mult disabilities
- 13.1008 = Ed/teaching indiv w physical impairments
- 13.1012 = Ed/teaching indiv w speech/lang impair
- 13.1015 = Ed/teaching early childhood special ed
- 13.1099 = Special education and teaching, other
- 13.1202 = Elementary education and teaching
- 13.1203 = Junior high/middle school ed/teaching
- 13.1205 = Secondary education and teaching
- 13.1210 = Early childhood education/teaching

Appendix D. Facsimile of Full-scale Instrument—Section B. Undergraduate Education

13.1302 = Art teacher education	19.0701 = Human development/fam studies, general
13.1303 = Business teacher education	19.0706 = Child development
13.1305 = English/language arts teacher education	19.0799 = Human dev/fam studies/related, other
13.1306 = Foreign language teacher education	19.9999 = Family/consumer sci/human sci, other
13.1307 = Health teacher education	22.0000 = Legal studies, general
13.1311 = Mathematics teacher education	22.0001 = Pre-law studies
13.1312 = Music teacher education	22.0101 = Law
13.1314 = Physical education teaching and coaching	22.0203 = American/U.S. law/legal studies
13.1316 = Science teacher education	22.0205 = Banking/corporate/finance/securities law
13.1317 = Social science teacher education	22.0302 = Legal assistant/paralegal
13.1318 = Social studies teacher education	22.9999 = Legal professions and studies, other
13.1320 = Trade and industrial teacher education	23.0101 = English language and literature, general
13.1322 = Biology teacher education	23.1302 = Creative writing
13.1326 = German language teacher education	23.1303 = Professional/business/scientific writing
13.1328 = History teacher education	23.1499 = Literature, other
13.1334 = School librarian/media specialist	23.9999 = English lang/literature/letters, other
13.1399 = Teacher ed/prof dev, other subject area	24.0101 = Liberal arts/sciences/liberal studies
13.9999 = Education, other	24.0102 = General studies
14.0201 = Aerospace/aeronautical/space engineering	24.0103 = Humanities/humanistic studies
14.0501 = Bioengineering/biomedical engineering	24.0199 = Liberal arts/sci, general studies, other
14.0701 = Chemical engineering	26.0101 = Biology/biological sciences, general
14.0801 = Civil engineering, general	26.0102 = Biomedical sciences, general
14.0803 = Structural engineering	26.0202 = Biochemistry
14.0901 = Computer engineering, general	26.0204 = Molecular biology
14.0903 = Computer software engineering	26.0210 = Biochemistry and molecular biology
14.0999 = Computer engineering, other	26.0499 = Cell/cellular bio/anatomical sci, other
14.1001 = Electric/electronics/comm engineering	26.0502 = Microbiology, general
14.1201 = Engineering physics/applied physics	26.0701 = Zoology/animal biology
14.1801 = Materials engineering	26.0709 = Wildlife biology
14.1901 = Mechanical engineering	26.0806 = Human/medical genetics
14.2701 = Systems engineering	26.0899 = Genetics, other
14.3301 = Construction engineering	26.0908 = Exercise physiology
14.3501 = Industrial engineering	26.1199 = Biomath, bioinformatics, comp bio, other
14.9999 = Engineering, other	26.1301 = Ecology
15.0000 = Engineering technology, general	26.1302 = Marine biology/biological oceanography
15.0201 = Civil engineering technology/technician	26.1501 = Neuroscience
15.0303 = Electrical/electronic/comm engin tech	26.9999 = Biological/biomedical sciences, other
15.0701 = Occupational safety and health tech	27.0101 = Mathematics, general
15.1001 = Construction engineering tech/technician	27.0301 = Applied mathematics, general
15.1201 = Computer engineering tech/technician	27.0305 = Financial mathematics
15.1399 = Draft/design engineer tech/technicians	27.0399 = Applied mathematics, other
15.1501 = Engineering/industrial management	27.0503 = Mathematics and statistics
15.1503 = Packaging science	30.0000 = Multi/interdisciplinary studies, general
16.0102 = Linguistics	30.0101 = Biological and physical sciences
16.0301 = Chinese language and literature	30.1101 = Gerontology
16.0302 = Japanese language and literature	30.1501 = Science, technology and society
16.0402 = Russian language and literature	30.1701 = Behavioral sciences
16.0901 = French language and literature	30.1801 = Natural sciences
16.0905 = Spanish language and literature	30.2001 = International/global studies
16.1200 = Classics langs/lit/ling, general	30.2301 = Multi/intercultural/diversity studies
16.1202 = Ancient/classical Greek language/lit	30.9999 = Multi-/interdisciplinary studies, other
16.1603 = Sign language interpretation/translation	31.0101 = Parks, recreation and leisure studies
19.0000 = Work and family studies	31.0301 = Parks/rec/leisure facil mgmt, general
19.0402 = Consumer economics	31.0501 = Health/physical ed/fitness, general
19.0505 = Foodservice systems admin/management	31.0504 = Sport and fitness administration/mgmt

Appendix D. Facsimile of Full-scale Instrument—Section B. Undergraduate Education

31.0505 = Kinesiology and exercise science	45.1201 = Urban studies/affairs
31.0508 = Sports studies	45.1301 = Sociology and anthropology
31.0599 = Health/physical education/fitness, other	45.9999 = Social sciences, other
31.0601 = Outdoor education	46.0412 = Building/construction site management
31.9999 = Parks/recreation/leisure/fitness, other	47.0603 = Autobody/collision and repair tech
38.0101 = Philosophy	47.0604 = Automotive mechanics tech/technician
38.0103 = Ethics	49.0399 = Marine transportation, other
38.0201 = Religion/religious studies	50.0102 = Digital arts
39.0201 = Bible/biblical studies	50.0301 = Dance, general
39.0601 = Theology/theological studies	50.0401 = Design/visual communications, general
39.0602 = Divinity/ministry	50.0404 = Industrial and product design
39.0702 = Youth ministry	50.0407 = Fashion/apparel design
39.0799 = Pastoral counseling/ministries, other	50.0408 = Interior design
40.0404 = Meteorology	50.0409 = Graphic design
40.0501 = Chemistry, general	50.0410 = Illustration
40.0599 = Chemistry, other	50.0501 = Drama/dramatics/theatre arts, general
40.0601 = Geology/earth science, general	50.0601 = Film/cinema/video studies
40.0801 = Physics, general	50.0602 = Cinematography and film/video production
40.1001 = Materials science	50.0605 = Photography
41.0301 = Chemical technology/technician	50.0699 = Film/video and photographic arts, other
41.9999 = Science technologies/technicians, other	50.0702 = Fine/studio arts, general
42.0101 = Psychology, general	50.0708 = Painting
42.2706 = Physiological psychology/psychobiology	50.0901 = Music, general
42.2801 = Clinical psychology	50.0903 = Music performance, general
42.2803 = Counseling psychology	50.0904 = Music theory and composition
42.2804 = Industrial and organizational psychology	50.0912 = Music pedagogy
42.2806 = Educational psychology	50.0913 = Music technology
42.2810 = Health/medical psychology	50.9999 = Visual and performing arts, other
42.2812 = Forensic psychology	51.0000 = Health services/allied health, general
42.2813 = Applied psychology	51.0001 = Health and wellness, general
42.2899 = Clinical/counseling/applied psych, other	51.0201 = Communication science/disorders, general
42.9999 = Psychology, other	51.0203 = Speech-language pathology/pathologist
43.0103 = Criminal justice/law enforcement admin	51.0599 = Advanced dentistry/oral sci, other
43.0106 = Forensic science and technology	51.0602 = Dental hygiene/hygienist
43.0107 = Criminal justice/police science	51.0701 = Health/health care administration/mgmt
43.0111 = Criminalistics and criminal science	51.0702 = Hospital/health care facil admin/mgmt
43.0116 = Cyber/comp forensics/counterterrorism	51.0704 = Health unit manager/ward supervisor
43.0199 = Corrections and criminal justice, other	51.0706 = Health info/medical records admin
43.0203 = Fire science/firefighting	51.0808 = Veterinary/animal health tech/assistant
43.0302 = Crisis/emergency/disaster management	51.0908 = Respiratory care therapy/therapist
44.0000 = Human services, general	51.0913 = Athletic training/trainer
44.0401 = Public administration	51.1102 = Pre-medicine/pre-medical studies
44.0501 = Public policy analysis	51.1104 = Pre-veterinary studies
44.0504 = International public policy analysis	51.1107 = Pre-occupational therapy studies
44.0701 = Social work	51.2201 = Public health, general
44.9999 = Public admin/social service, other	51.2207 = Public health education and promotion
45.0101 = Social science, general	51.2208 = Community health and preventive medicine
45.0201 = Anthropology	51.2305 = Music therapy/therapist
45.0204 = Cultural anthropology	51.2306 = Occupational therapy/therapist
45.0401 = Criminology	51.2314 = Rehabilitation science
45.0601 = Economics, general	51.3101 = Dietetics/dietitian
45.0699 = Economics, other	51.3801 = Nursing/registered nurse
45.0701 = Geography	51.3808 = Nursing science
45.0702 = Geographic info science and cartography	51.3818 = Nursing practice
45.0999 = International rel/national security, other	
45.1001 = Political science/government, general	
45.1101 = Sociology	

51.3899 = Registered nursing admin/research/clinic
 52.0101 = Business/commerce, general
 52.0201 = Business admin and management, general
 52.0203 = Logistics materials/supply chain mgmt
 52.0205 = Operations management and supervision
 52.0213 = Organizational leadership
 52.0299 = Business/managerial operations, other
 52.0301 = Accounting
 52.0304 = Accounting and finance
 52.0305 = Accounting and business/management
 52.0407 = Business/office automation/data entry
 52.0409 = Parts, warehousing, inventory mgmt ops
 52.0501 = Business/corporate communications
 52.0601 = Business/managerial economics
 52.0701 = Entrepreneurship/entrepreneurial studies
 52.0799 = Entrepreneurial and small bus ops, other
 52.0801 = Finance, general
 52.0803 = Banking and financial support services
 52.0804 = Financial planning and services
 52.0806 = International finance
 52.0899 = Finance/financial mgmt services, other
 52.0901 = Hospitality administration/mgmt, general
 52.0903 = Tourism and travel services management
 52.0905 = Restaurant/food services management
 52.0909 = Hotel, motel, and restaurant management
 52.1001 = Human resources mgmt/pers admin,
 general
 52.1099 = Human resources mgmt and services,
 other
 52.1101 = International business/trade/commerce
 52.1206 = Information resources management
 52.1301 = Management science
 52.1304 = Actuarial science
 52.1401 = Marketing/marketing management,
 general
 52.1402 = Marketing research
 52.1499 = Marketing, other
 52.1701 = Insurance
 52.1801 = Sales/distrib/marketing ops, general
 52.1803 = Retailing and retail operations
 52.1804 = Selling skills and sales operations
 52.1899 = General merch, sales/marketing ops
 other
 52.1902 = Fashion merchandising
 52.1908 = Business/financial svcs marketing ops
 52.2001 = Construction management
 52.2101 = Telecommunications management
 52.9999 = Business, management, marketing, other
 54.0101 = History, general
 54.0102 = American history United States
 54.0105 = Public/applied history
 54.0199 = History, other

Applies to: Respondents who either did not have a double major at the NPSAS school and had no preloaded primary major, or who had a double major at the NPSAS school and had no preloaded primary or second major.

Instrument code: (RBDBLMAJ) = 0 and [no preloaded primary major from NPSAS:08 FS]) or (RBDBLMAJ) ne 0 and [no preloaded primary or second major from NPSAS:08 FS])

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPMJ2

NPSAS second major: string

[If COMPMODE = 0]

What was your second major at [NPSAS] for your bachelor's degree?

Please type your major in the box provided and then click the "Search for Major" button. A list of categories that match your entry will be displayed.

[else]

What was your second major at [NPSAS] for your bachelor's degree?

Please bear with me while I code this.

Applies to: Respondents who had a double major at the NPSAS school and had no preloaded primary or second major.

Instrument code: RBDBLMAJ = 1 and [no preloaded primary or second major from NPSAS:08 FS])

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNP2GEN

NPSAS second major: general CIP code

[If COMPMODE = 0]

What was your second major at [NPSAS] for your bachelor's degree?

Please type your major in the box provided and then click the "Search for Major" button. A list of categories that match your entry will be displayed.

[else]

What was your second major at [NPSAS] for your bachelor's degree?

Please bear with me while I code this.

The 2010 Classification of Instructional Programs (CIP) was used to code these data. See

<http://nces.ed.gov/ipeds/cipcode/> for more information on the CIP.

- 1 = Agriculture/operations/related sciences
- 3 = Natural resources and conservation
- 4 = Architecture and related services
- 5 = Area/ethnic/cultural/gender/grp studies
- 9 = Communication, journalism, related
- 10 = Communication technology and support
- 11 = Computer/information science/support
- 12 = Personal and culinary services
- 13 = Education
- 14 = Engineering
- 15 = Engineering technologies/related fields
- 16 = Foreign languages/literature/linguistics
- 19 = Family/consumer sciences/human sciences
- 22 = Legal professions and studies
- 23 = English language and literature/letters
- 24 = Liberal arts/sci/gen studies/humanities
- 25 = Library science
- 26 = Biological and biomedical sciences
- 27 = Mathematics and statistics
- 28 = Military sci/leadership/operational art
- 29 = Military technologies/applied sciences
- 30 = Multi/interdisciplinary studies
- 31 = Parks/recreation/leisure/fitness studies
- 38 = Philosophy and religious studies
- 39 = Theology and religious vocations
- 40 = Physical sciences
- 41 = Science technologies/technicians
- 42 = Psychology
- 43 = Homeland security/law enforce/protective
- 44 = Public administration/social service
- 45 = Social sciences
- 46 = Construction trades
- 47 = Mechanic/repair technologies/technicians
- 48 = Precision production
- 49 = Transportation and materials moving
- 50 = Visual and performing arts
- 51 = Health professions and related programs
- 52 = Business/management/marketing/related
- 54 = History
- 60 = Residency programs

Applies to: Respondents who had a double major at the NPSAS school and had no preloaded primary or second major.

Instrument code: RBDBLMAJ = 1 and [no preloaded primary or second major from NPSAS:08 FS]

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNP2SPE

NPSAS second major: specific CIP code

[If COMPMODE = 0]

What was your second major at [NPSAS] for your bachelor's degree?

Please type your major in the box provided and then click the "Search for Major" button. A list of categories that match your entry will be displayed.

[else]

What was your second major at [NPSAS] for your bachelor's degree?

Please bear with me while I code this.

The 2010 Classification of Instructional Programs (CIP) was used to code these data. See

<http://nces.ed.gov/ipeds/cipcode/> for more information on the CIP.

- 01.0102 = Agribusiness/agricultural bus operations
- 01.0801 = Agricultural/extension ed services
- 01.0901 = Animal sciences, general
- 03.0103 = Environmental studies
- 04.0201 = Architecture
- 05.0102 = American/U.S. studies/civilization
- 05.0103 = Asian studies/civilization
- 05.0104 = East Asian studies
- 05.0110 = Russian studies
- 05.0201 = African-American/black studies
- 05.0207 = Women's studies
- 09.0100 = Communication, general
- 09.0102 = Mass communication/media studies
- 09.0199 = Communication/media studies, other
- 09.0401 = Journalism
- 09.0701 = Radio and television
- 09.0900 = Public relations/advertising
- 09.0901 = Organizational communication, general
- 09.0902 = Public relations/image management
- 09.0903 = Advertising
- 09.0999 = Public relations/advertising, other
- 10.0202 = Radio and television broadcasting tech
- 11.0101 = Computer and info sciences, general
- 11.0199 = Computer and information science, other
- 11.0201 = Computer programming/programmer, general
- 11.0701 = Computer science
- 11.0801 = Web page, digital/multimedia/design
- 11.1003 = Computer/info systems security/assurance
- 11.1099 = Computer/info tech services admin/mgmt

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12.0503 = Culinary arts/chef training	24.0199 = Liberal arts/sci, general studies, other
13.0101 = Education, general	26.0101 = Biology/biological sciences, general
13.0201 = Bilingual and multilingual education	26.0102 = Biomedical sciences, general
13.0404 = Educational/instruct/curric supervision	26.0202 = Biochemistry
13.0607 = Learning sciences	26.0204 = Molecular biology
13.1001 = Special education and teaching, general	26.0406 = Cell/cellular and molecular biology
13.1015 = Ed/teaching early childhood special ed	26.0708 = Animal behavior and ethology
13.1017 = Ed/teaching elementary special ed	26.0801 = Genetics, general
13.1099 = Special education and teaching, other	26.0908 = Exercise physiology
13.1202 = Elementary education and teaching	26.1301 = Ecology
13.1205 = Secondary education and teaching	26.1501 = Neuroscience
13.1210 = Early childhood education/teaching	26.9999 = Biological/biomedical sciences, other
13.1305 = English/language arts teacher education	27.0101 = Mathematics, general
13.1307 = Health teacher education	27.0301 = Applied mathematics, general
13.1311 = Mathematics teacher education	27.0501 = Statistics, general
13.1312 = Music teacher education	27.0503 = Mathematics and statistics
13.1314 = Physical education teaching and coaching	30.0501 = Peace studies and conflict resolution
13.1316 = Science teacher education	30.0801 = Mathematics and computer science
13.1318 = Social studies teacher education	30.1001 = Biopsychology
13.1322 = Biology teacher education	30.2301 = Multi/intercultural/diversity studies
13.1326 = German language teacher education	31.0504 = Sport and fitness administration/mgmt
13.1329 = Physics teacher education	31.0505 = Kinesiology and exercise science
13.1330 = Spanish language teacher education	38.0101 = Philosophy
14.0101 = Engineering, general	38.0201 = Religion/religious studies
14.0501 = Bioengineering/biomedical engineering	38.0203 = Christian studies
14.0701 = Chemical engineering	39.0201 = Bible/biblical studies
14.0901 = Computer engineering, general	39.0301 = Missions/missionary studies/missiology
14.0903 = Computer software engineering	39.0501 = Religious/sacred music
14.1001 = Electric/electronics/comm engineering	39.0601 = Theology/theological studies
14.1901 = Mechanical engineering	39.0701 = Pastoral studies/counseling
14.3501 = Industrial engineering	40.0501 = Chemistry, general
15.0805 = Mechanical engineering/mechanical tech	40.0510 = Forensic chemistry
15.1202 = Computer technology/computer system tech	40.0601 = Geology/earth science, general
15.1302 = CAD/CADD drafting/design tech/technician	40.0801 = Physics, general
16.0102 = Linguistics	40.9999 = Physical sciences, other
16.0104 = Comparative literature	41.0000 = Science technologies/technicians general
16.0402 = Russian language and literature	42.0101 = Psychology, general
16.0500 = Germanic lang/lit/ling, general	42.2702 = Comparative psychology
16.0901 = French language and literature	42.2707 = Social psychology
16.0902 = Italian language and literature	42.2806 = Educational psychology
16.0905 = Spanish language and literature	43.0102 = Corrections
16.1102 = Hebrew language and literature	43.0103 = Criminal justice/law enforcement admin
16.1103 = Ancient Near Eastern langs/lit/ling	43.0107 = Criminal justice/police science
16.1200 = Classics langs/lit/ling, general	43.0111 = Criminalistics and criminal science
16.1203 = Latin language and literature	43.0199 = Corrections and criminal justice, other
16.1699 = American Sign Language, other	44.0000 = Human services, general
19.0701 = Human development/fam studies, general	44.0701 = Social work
22.0000 = Legal studies, general	45.0201 = Anthropology
22.0210 = International business/trade/tax law	45.0204 = Cultural anthropology
22.0302 = Legal assistant/paralegal	45.0301 = Archeology
23.0101 = English language and literature, general	45.0601 = Economics, general
23.1301 = Writing, general	45.0699 = Economics, other
23.1302 = Creative writing	45.0901 = International relations/affairs
24.0102 = General studies	45.1001 = Political science/government, general
	45.1099 = Political science and government, other
	45.1101 = Sociology

Appendix D. Facsimile of Full-scale Instrument—Section B. Undergraduate Education

46.0499 = Bldg/construction mgmt, inspection
other
49.0309 = Marine science/merchant marine officer
50.0101 = Visual and performing arts, general
50.0301 = Dance, general
50.0401 = Design/visual communications, general
50.0499 = Design and applied arts, other
50.0501 = Drama/dramatics/theatre arts, general
50.0601 = Film/cinema/video studies
50.0602 = Cinematography and film/video
production
50.0605 = Photography
50.0701 = Art/art studies, general
50.0702 = Fine/studio arts, general
50.0703 = Art history, criticism and conservation
50.0706 = Intermedia/multimedia
50.0708 = Painting
50.0901 = Music, general
50.0903 = Music performance, general
50.0910 = Jazz/jazz studies
50.0913 = Music technology
50.9999 = Visual and performing arts, other
51.0000 = Health services/allied health, general
51.0001 = Health and wellness, general
51.0201 = Communication science/disorders,
general
51.0806 = Physical therapy technician/assistant
51.0908 = Respiratory care therapy/therapist
51.0913 = Athletic training/trainer
51.1005 = Clinical laboratory science/medical tech
51.1099 = Clinical/medical lab/allied prof, other
51.1102 = Pre-medicine/pre-medical studies
51.1105 = Pre-nursing studies
51.1107 = Pre-occupational therapy studies
51.1109 = Pre-physical therapy studies
51.1508 = Mental health counseling/counselor
51.2201 = Public health, general
51.2206 = Occupational health/industrial hygiene
51.3801 = Nursing/registered nurse
51.3808 = Nursing science
52.0101 = Business/commerce, general
52.0201 = Business admin and management, general
52.0204 = Office management and supervision
52.0205 = Operations management and supervision
52.0212 = Retail management
52.0299 = Business/managerial operations, other
52.0301 = Accounting
52.0302 = Accounting tech/technician/bookkeeping
52.0304 = Accounting and finance
52.0305 = Accounting and business/management
52.0601 = Business/managerial economics
52.0701 = Entrepreneurship/entrepreneurial studies
52.0703 = Small business administration/mgmt
52.0801 = Finance, general
52.0901 = Hospitality administration/mgmt, general
52.1001 = Human resources mgmt/pers admin,
general

52.1099 = Human resources mgmt and services,
other
52.1101 = International business/trade/commerce
52.1201 = Management information systems,
general
52.1301 = Management science
52.1401 = Marketing/marketing management,
general
52.1501 = Real estate
52.1701 = Insurance
52.1801 = Sales/distrib/marketing ops, general
52.1902 = Fashion merchandising
52.9999 = Business, management, marketing, other
54.0101 = History, general
54.0103 = European history
54.0199 = History, other
60.0418 = Nuclear medicine

Applies to: Respondents who had a double major at the NPSAS school and had no preloaded primary or second major.

Instrument code: RBDBLMAJ = 1 and [no preloaded primary or second major from NPSAS:08 FS]
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBEXPWD

Academic experiences at NPSAS: withdrew from course

While enrolled at [NPSAS] for your bachelor's degree did you...

Withdraw from a course after the add/drop period?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBEXPRP

Academic experiences at NPSAS: repeated course for higher grade

While enrolled at [NPSAS] for your bachelor's degree did you...

Repeat a course to earn a higher grade?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBEXPIN

Academic experiences at NPSAS: received an incomplete grade
While enrolled at [NPSAS] for your bachelor's degree did you...

Receive an incomplete grade in a course?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBEXPAP

Academic experiences at NPSAS: placed on academic probation
While enrolled at [NPSAS] for your bachelor's degree did you...

Get placed on academic probation?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBEXPGH

Academic experiences at NPSAS: graduated with academic honors
While enrolled at [NPSAS] for your bachelor's degree did you...

Graduate with any type of academic honors?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBEXPDL

Academic experiences at NPSAS: placed on Dean's List
While enrolled at [NPSAS] for your bachelor's degree did you...

Ever get placed on the Dean's List?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPCONT

Continuously enrolled at NPSAS for bachelor's degree
[If RBNPBMY ne -9 and RAAWRDMY >= 200807]

Between [RBNPBMY] and when you completed your requirements for your bachelor's degree, were you continuously enrolled at [NPSAS] for your bachelor's degree? (By "continuously enrolled" we mean that you did not have any breaks from [NPSAS] that lasted for more than four months.)

[else if RBNPBMY ne -9 and RAAWRDMY ne -9]
Between [RBNPBMY] and [RAAWRDMY], were you continuously enrolled at

[NPSAS] for your bachelor's degree? (By "continuously enrolled" we mean that you did not have any breaks from [NPSAS] that lasted for more than four months.)

(If you were continuously enrolled but completed your degree requirements more than four months before you were actually awarded your bachelor's degree, answer "yes.")

[else]

Were you continuously enrolled at [NPSAS] for your bachelor's degree? (By "continuously enrolled" we mean that you did not have any breaks from [NPSAS] that lasted for more than four months.)

(If you were continuously enrolled but completed your degree requirements more than four months before you were actually awarded your bachelor's degree, answer "yes.")

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPSTSC

NPSAS stopout reason: to enroll at different school

Why did you decide to take a break from [NPSAS]?
Wanted to enroll at a different school (including for study abroad)

0 = No

1 = Yes

Applies to: Respondents who were not continuously enrolled at [NPSAS].

Instrument code: RBNPCONT = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPSTAC

NPSAS stopout reason: academic problems

Why did you decide to take a break from [NPSAS]?

Academic problems

0 = No

1 = Yes

Applies to: Respondents who were not continuously enrolled at [NPSAS].

Instrument code: RBNPCONT = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPSTTO

NPSAS stopout reason: needed time off from studying

Why did you decide to take a break from [NPSAS]?

Needed time off from studying

0 = No

1 = Yes

Applies to: Respondents who were not continuously enrolled at [NPSAS].

Instrument code: RBNPCONT = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPSTMI

NPSAS stopout reason: conflicts with job/military

Why did you decide to take a break from [NPSAS]?

Conflicted with job/military

0 = No

1 = Yes

Applies to: Respondents who were not continuously enrolled at [NPSAS].

Instrument code: RBNPCONT = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPSTWK

NPSAS stopout reason: work for financial reasons

Why did you decide to take a break from [NPSAS]?

Needed to work for financial reasons

0 = No

1 = Yes

Applies to: Respondents who were not continuously enrolled at [NPSAS].

Instrument code: RBNPCONT = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPSTFI

NPSAS stopout reason: other financial reasons

Why did you decide to take a break from [NPSAS]?

Other financial reasons

0 = No

1 = Yes

Applies to: Respondents who were not continuously enrolled at [NPSAS].

Instrument code: RBNPCONT = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPSTDI

NPSAS stopout reason: change in family status

Why did you decide to take a break from [NPSAS]?

Changed family status (such as marriage or divorce, baby, death in family)

0 = No

1 = Yes

Applies to: Respondents who were not continuously enrolled at [NPSAS].

Instrument code: RBNPCONT = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPSTPR

NPSAS stopout reason: personal reasons

Why did you decide to take a break from [NPSAS]?

Personal reasons

0 = No

1 = Yes

Applies to: Respondents who were not continuously enrolled at [NPSAS].

Instrument code: RBNPCONT = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPSTOT

NPSAS stopout reason: other reasons

Why did you decide to take a break from [NPSAS]?

Other reason not listed

0 = No

1 = Yes

Applies to: Respondents who were not continuously enrolled at [NPSAS].

Instrument code: RBNPCONT = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNPDEG

Earned undergraduate certificate or associate's degree at NPSAS
 Before earning your bachelor's degree at [NPSAS], did you earn an undergraduate certificate or diploma or an associate's degree at [NPSAS]?

- 0 = No
- 1 = Yes, undergraduate certificate(s) or diploma(s)
- 2 = Yes, associate's degree(s)
- 3 = Yes, both undergraduate certificate(s) or diploma(s) and associate's degree(s)

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBOTHSCH

Attended other colleges before completing bachelor's at NPSAS
 Other than [NPSAS], did you attend any other colleges, universities, or trade schools as an undergraduate student between the time you graduated from high school and the time you graduated with your bachelor's degree from [NPSAS] in [RAAWRDMY]? Please include summer enrollment and any other undergraduate classes you have taken that earned college credit, including enrollment for credit at any schools where you studied abroad.

- 0 = No
- 1 = Yes

Applies to: All respondents.

Recode note: If RBNFST = 0 then RBOTHSCH = 1
 Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBSCH01

[RBSCH01]: name

[If RBNFST = 0 and iteration = 1 and COMPMODE = 0]

What is the name of the first college, university, or trade school you enrolled in after completing your high school requirements?

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select "Foreign Country" from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)
2. Click on the name of your school in the resulting list.
 Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else if RBNFST = 0 and iteration = 1 and COMPMODE = 1]

What is the name of the first college, university, or trade school you enrolled in after completing your high school requirements, and in what city and state is it located?

Please bear with me while I code this.

[else if COMPMODE = 0]

What is the name of that school? If you attended more than one other school between high school and before your graduation from [NPSAS]

tell us about the most recent school first. You will have an opportunity to tell us about all schools later.

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select "Foreign Country" from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)
2. Click on the name of your school in the resulting list.
 Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else]

At what other school have you had enrollment between the time you graduated from high school and the time you graduated from [NPSAS], and in what city and state is it located?

(If you attended more than one other school between high school and before your graduation from [NPSAS] tell me about the most recent school first. You will have an opportunity to tell me about all schools later.) Please bear with me while I code this.

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS.

Source: B&B:08/09 full scale student interview

RBIPED01

[RBSCH01]: IPEDS

[If RBNFST = 0 and iteration = 1 and COMPMODE = 0]

What is the name of the first college, university, or trade school you enrolled in after completing your high school requirements?

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select "Foreign Country" from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)
2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else if RBNFST = 0 and iteration = 1 and COMPMODE = 1]

What is the name of the first college, university, or trade school you enrolled in after completing your high school requirements, and in what city and state is it located?

Please bear with me while I code this.

[else if COMPMODE = 0]

What is the name of that school? If you attended more than one other school between high school and before your graduation from [NPSAS] tell us about the most recent school first. You will have an opportunity to tell us about all schools later.

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select "Foreign Country" from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)
2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else]

At what other school have you had enrollment between the time you graduated from high school and the time you graduated from [NPSAS], and in what city and state is it located? (If you attended more than one other school between high school and before your graduation from [NPSAS] tell me about the most recent school first. You will have an opportunity to tell me about all schools later.) Please bear with me while I code this.

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS.

Source: B&B:08/09 full scale student interview

RBCT01

[RBSCH01]: city

[If RBNFST = 0 and iteration = 1 and COMPMODE = 0]

What is the name of the first college, university, or trade school you enrolled in after completing your high school requirements?

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select "Foreign Country" from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)
2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else if RBNFST = 0 and iteration = 1 and COMPMODE = 1]

What is the name of the first college, university, or trade school you enrolled in after completing your high school requirements, and in what city and state is it located?

Please bear with me while I code this.

[else if COMPMODE = 0]

What is the name of that school? If you attended more than one other school between high school and before your graduation from [NPSAS] tell us about the most recent school first. You will have an opportunity to tell us about all schools later.

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select "Foreign Country" from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)
2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else]

At what other school have you had enrollment between the time you graduated from high school and the time you graduated from [NPSAS], and in what city and state is it located? (If you attended more than one other school between high school and before your graduation from [NPSAS] tell me about the most recent school first. You will have an opportunity to tell me about all schools later.) Please bear with me while I code this.

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS.

Source: B&B:08/09 full scale student interview

RBST01

[RBSCH01]: state

[If RBNFST = 0 and iteration = 1 and COMPMODE = 0]

What is the name of the first college, university, or trade school you enrolled in after completing your high school requirements?

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select "Foreign Country" from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)

2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else if RBNFST = 0 and iteration = 1 and COMPMODE = 1]

What is the name of the first college, university, or trade school you enrolled in after completing your high school requirements, and in what city and state is it located?

Please bear with me while I code this.

[else if COMPMODE = 0]

What is the name of that school? If you attended more than one other school between high school and before your graduation from [NPSAS] tell us about the most recent school first. You will have an opportunity to tell us about all schools later.

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select "Foreign Country" from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)

2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else]

At what other school have you had enrollment between the time you graduated from high school and the time you graduated from [NPSAS], and in what city and state is it located?

(If you attended more than one other school between high school and before your graduation from [NPSAS] tell me about the most recent school first. You will have an opportunity to tell me about all schools later.) Please bear with me while I code this.

- | | |
|--------------------------|-----------------------|
| 1 = Alabama | 33 = New York |
| 2 = Alaska | 34 = North Carolina |
| 3 = Arizona | 35 = North Dakota |
| 4 = Arkansas | 36 = Ohio |
| 5 = California | 37 = Oklahoma |
| 6 = Colorado | 38 = Oregon |
| 7 = Connecticut | 39 = Pennsylvania |
| 8 = Delaware | 40 = Rhode Island |
| 9 = District of Columbia | 41 = South Carolina |
| 10 = Florida | 42 = South Dakota |
| 11 = Georgia | 43 = Tennessee |
| 12 = Hawaii | 44 = Texas |
| 13 = Idaho | 45 = Utah |
| 14 = Illinois | 46 = Vermont |
| 15 = Indiana | 47 = Virginia |
| 16 = Iowa | 48 = Washington |
| 17 = Kansas | 49 = West Virginia |
| 18 = Kentucky | 50 = Wisconsin |
| 19 = Louisiana | 51 = Wyoming |
| 20 = Maine | 52 = Puerto Rico |
| 21 = Maryland | 54 = American Samoa |
| 22 = Massachusetts | 55 = Guam |
| 23 = Michigan | 56 = Fed State |
| 24 = Minnesota | Micronesia |
| 25 = Mississippi | 57 = Marshall Islands |
| 26 = Missouri | 58 = Northern |
| 27 = Montana | Mariana Isl |
| 28 = Nebraska | 59 = Palau |
| 29 = Nevada | 60 = U.S. Virgin |
| 30 = New Hampshire | Islands |
| 31 = New Jersey | 63 = FOREIGN |
| 32 = New Mexico | COUNTRY |

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS.

Source: B&B:08/09 full scale student interview

RBLEVL01

[RBSCH01]: level

[If RBNFST = 0 and iteration = 1 and COMPMODE = 0]

What is the name of the first college, university, or trade school you enrolled in after completing your high school requirements?

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select "Foreign Country" from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)

2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school

name with the city and state will help to limit the number of schools displayed.

[else if RBNFST = 0 and iteration = 1 and
COMPMODE = 1]

What is the name of the first college, university, or trade school you enrolled in after completing your high school requirements, and in what city and state is it located?

Please bear with me while I code this.

[else if COMPMODE = 0]

What is the name of that school? If you attended more than one other school between high school and before your graduation from [NPSAS] tell us about the most recent school first. You will have an opportunity to tell us about all schools later.

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select "Foreign Country" from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)

2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else]

At what other school have you had enrollment between the time you graduated from high school and the time you graduated from [NPSAS], and in what city and state is it located?

(If you attended more than one other school between high school and before your graduation from [NPSAS] tell me about the most recent school first. You will have an opportunity to tell me about all schools later.) Please bear with me while I code this.

1 = 4-year

2 = 2-year

3 = Less-than-2-year

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS.

Source: B&B:08/09 full scale student interview

RBCTRL01

[RBSCH01]: control

[If RBNFST = 0 and iteration = 1 and COMPMODE = 0]

What is the name of the first college, university, or trade school you enrolled in after completing your high school requirements?

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select "Foreign Country" from the state list and click "Search for School." (We do not have

schools in foreign countries in our database so we will then collect some additional information from you.)

2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else if RBNFST = 0 and iteration = 1 and
COMPMODE = 1]

What is the name of the first college, university, or trade school you enrolled in after completing your high school requirements, and in what city and state is it located? Please bear with me while I code this.

[else if COMPMODE = 0]

What is the name of that school? If you attended more than one other school between high school and before your graduation from [NPSAS] tell us about the most recent school first. You will have an opportunity to tell us about all schools later.

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select "Foreign Country" from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)

2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else]

At what other school have you had enrollment between the time you graduated from high school and the time you graduated from [NPSAS], and in what city and state is it located?

(If you attended more than one other school between high school and before your graduation from [NPSAS] tell me about the most recent school first. You will have an opportunity to tell me about all schools later.) Please bear with me while I code this.

1 = Public

2 = Private not-for-profit

3 = Private for-profit

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS.

Source: B&B:08/09 full scale student interview

RBBMY01

Date first enrolled at [RBSCH01]

In what month and year were you first enrolled at [RBSCH01]?

Please select both a month and a year from the dropdowns.

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS.

Source: B&B:08/09 full scale student interview

RBEMY01

Date last enrolled at [RBSCH01]

[If RBFSTMY ne -9 and iteration = 1]

From your beginning enrollment date of [RBFSTMY], in what month and year were you last enrolled at [RBSCH01] before your graduation from [NPSAS] in [RAAWRDMY]?

[else if RBBMY01 ne -9]

From your beginning enrollment date of [RBBMY01], in what month and year were you last enrolled at [RBSCH01] before your graduation from [NPSAS] in [RAAWRDMY]?

[else]

From your beginning enrollment date, in what month and year were you last enrolled at [RBSCH01] before your graduation from [NPSAS] in [RAAWRDMY]?

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS.

Source: B&B:08/09 full scale student interview

RBCONT01

Continuously enrolled at [RBSCH01]

[If RBFSTMY ne -9 and RBEMY01 ne -9 and iteration = 1]

Between [RBFSTMY] and [RBEMY01], were you continuously enrolled at [RBSCH01]? (By "continuously enrolled" we mean that you did not have any breaks from [RBSCH01] that lasted for more than four months.)

[If RBBMY01 ne -9 and RBEMY01 ne -9]

Between [RBBMY01] and [RBEMY01], were you continuously enrolled at [RBSCH01]? (By "continuously enrolled" we mean that you did not have any breaks from [RBSCH01] that lasted for more than four months.)

[else]

Were you continuously enrolled at [RBSCH01]? (By "continuously enrolled" we mean that you did not have any breaks from [RBSCH01] that lasted for more than four months.)

0 = No

1 = Yes

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS for a period of more than 4 months.

Source: B&B:08/09 full scale student interview

RBSTER01

[RBSCH01] stopout reason: primarily enrolled elsewhere

Why did you decide to take a break from [RBSCH01]?

Primarily enrolled at a different school

0 = No

1 = Yes

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS for a period of more than 4 months and was not continuously enrolled.

Source: B&B:08/09 full scale student interview

RBSTSC01

[RBSCH01] stopout reason: to enroll at different school

Why did you decide to take a break from [RBSCH01]?

Wanted to enroll at a different school (including for study abroad)

0 = No

1 = Yes

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS for a period of more than 4 months and was not continuously enrolled.

Source: B&B:08/09 full scale student interview

RBSTAC01

[RBSCH01] stopout reason: academic problems

Why did you decide to take a break from [RBSCH01]?

Academic problems

0 = No

1 = Yes

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS for a period of more than 4 months and was not continuously enrolled.

Source: B&B:08/09 full scale student interview

RBSTTO01

[RBSCH01] stopout reason: needed time off from studying

Why did you decide to take a break from [RBSCH01]?

Needed time off from studying

0 = No

1 = Yes

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS for a period of more than 4 months and was not continuously enrolled.

Source: B&B:08/09 full scale student interview

RBSTMI01

[RBSCH01] stopout reason: conflicts with job/military

Why did you decide to take a break from [RBSCH01]?

Conflicted with job/military

0 = No

1 = Yes

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS for a period of more than 4 months and was not continuously enrolled.

Source: B&B:08/09 full scale student interview

RBSTWK01

[RBSCH01] stopout reason: work for financial reasons

Why did you decide to take a break from [RBSCH01]?

Needed to work for financial reasons

0 = No

1 = Yes

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS for a period of more than 4 months and was not continuously enrolled.

Source: B&B:08/09 full scale student interview

RBSTFI01

[RBSCH01] stopout reason: other financial reasons

Why did you decide to take a break from [RBSCH01]?

Other financial reasons

0 = No

1 = Yes

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS for a period of more than 4 months and was not continuously enrolled.

Source: B&B:08/09 full scale student interview

RBSTFM01

[RBSCH01] stopout reason: change in family status

Why did you decide to take a break from [RBSCH01]?

Changed family status (such as marriage or divorce, baby, death in family)

0 = No

1 = Yes

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS for a period of more than 4 months and was not continuously enrolled.

Source: B&B:08/09 full scale student interview

RBSTPR01

[RBSCH01] stopout reason: personal reasons

Why did you decide to take a break from [RBSCH01]?

Personal reasons

0 = No

1 = Yes

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS for a period of more than 4 months and was not continuously enrolled.

Source: B&B:08/09 full scale student interview

RBSTOT01

[RBSCH01] stopout reason: other reasons

Why did you decide to take a break from [RBSCH01]?

Other reason not listed

0 = No

1 = Yes

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS for a period of more than 4 months and was not continuously enrolled.

Source: B&B:08/09 full scale student interview

RBODEG01

[RBSCH01]: degree program

What undergraduate degree or certificate were you working on during your last term at [RBSCH01] before your graduation from [NPSAS] in [RAAWRDMY]? (If you were working on more than one degree or certificate at [RBSCH01], please select the one at the highest level.)

1 = Not working on a specific undergraduate degree at [T_SL_SCHNM] (there for summer school or studying abroad)

2 = Undergraduate certificate or diploma

3 = Associate's degree

4 = 4-year bachelor's degree program

5 = 5-year bachelor's degree program (also awarded by a 4-year college or university, but generally requires 5 years of full-time, college-level work)

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS.

Source: B&B:08/09 full scale student interview

RBERN01

[RBSCH01]: received degree

Did you complete your program of study and receive your

[RBODEG01] from [RBSCH01]?

0 = No

1 = Yes

Applies to: Respondents who attended another college for a degree or certificate before earning their bachelor's degree from NPSAS.

Source: B&B:08/09 full scale student interview

RBUGYR01

[RBSCH01]: year or level

What was your year or level during your last term of enrollment at [RBSCH01] for your [RBODEG01] before your graduation from [NPSAS] in [RAAWRDMY]?

1 = First year or freshman

2 = Second year or sophomore

3 = Third year or junior

4 = Fourth year or senior

5 = Fifth year or higher undergraduate

6 = Unclassified undergraduate

Applies to: Respondents who attended another college for a degree or certificate before earning their bachelor's degree from NPSAS and did not receive their degree or certificate.

Source: B&B:08/09 full scale student interview

RBMENR01

Enrolled at [RBSCH01] and NPSAS at the same time

Were you enrolled at both [RBSCH01] and [NPSAS] at the same time? (For example, you would say "yes" if you took a summer school class at [RBSCH01] in between semesters at [NPSAS], or if you were studying abroad while you were still considered to be a student at [NPSAS].)

0 = No

1 = Yes

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS.

Source: B&B:08/09 full scale student interview

RBTSN01

Attempted to transfer credits to NPSAS from [RBSCH01]

Did you attempt to transfer any credits to [NPSAS] from [RBSCH01]?

0 = No

1 = Yes

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS.

Source: B&B:08/09 full scale student interview

RBTRNC01

Credits accepted by NPSAS from [RBSCH01]

Were all, some, or none of those credits accepted by [NPSAS]?

1 = Some

2 = All

3 = None

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS and attempted to transfer credits to NPSAS.

Source: B&B:08/09 full scale student interview

RBOTSC01

Enrolled at another pre-bachelor's school

[If iteration = 1]

Did you attend any other colleges, universities, or trade schools besides [RBSCH01], as an undergraduate student between the time you graduated from high school and the time you graduated with your bachelor's degree from [NPSAS] in [RAAWRDMY]? (Include summer enrollment and any other undergraduate classes you have taken that earned college credit, including enrollment for credit at any schools where you studied abroad.)

[else]

You've told us that you have attended the following schools between high school and the time you graduated from [NPSAS]: [school 1] [school 2]... Have you attended any other colleges, universities, or trade schools as an undergraduate student between the time you graduated from high school and the time you graduated with your bachelor's degree from [NPSAS] in [RAAWRDMY]? (Include summer enrollment and any other undergraduate classes you have taken that earned college

credit, including enrollment for credit at any schools where you studied abroad.)

0 = No

1 = Yes

Applies to: Respondents who attended another college before earning their bachelor's degree from NPSAS.

Source: B&B:08/09 full scale student interview

RBNP2YR

Able to complete bachelor's without attending two-year institution

You indicated attending a two-year institution prior to earning your bachelor's degree from [NPSAS]. Would you have been able to complete your bachelor's degree if you had not attended a two-year institution?

0 = No

1 = Yes

Applies to: Respondents who ever attended a two-year undergraduate institution.

Instrument code: SCHLEVEL = 2 in the undergraduate school file

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBUGLN

Took out undergraduate loans

Other than money you may have borrowed from family or friends, did you take out any type of education loans to help pay for your undergraduate education?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNFED

Loan type: federal

What type of loans did you borrow to help pay for your undergraduate education?

Federal loans, such as Stafford or Perkins loans

0 = No

1 = Yes

Applies to: Respondents who took out an undergraduate loan or did not know whether they took out an undergraduate loan.

Instrument code: RBUGLN in (-1 1)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNPRI

Loan type: private

What type of loans did you borrow to help pay for your undergraduate education?

Private loans, such as Sallie Mae Signature, CitiAssist, and EXCEL loans

0 = No

1 = Yes

Applies to: Respondents who took out an undergraduate loan or did not know whether they took out an undergraduate loan.

Instrument code: RBUGLN in (-1 1)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNELSE

Loan type: other

What type of loans did you borrow to help pay for your undergraduate education?

Other types of loans

0 = No

1 = Yes

Applies to: Respondents who took out an undergraduate loan or did not know whether they took out an undergraduate loan.

Instrument code: RBUGLN in (-1 1)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBUGLAM

Amount borrowed in undergraduate loans

How much did you borrow in student loans for your entire undergraduate education? Please do not include any money borrowed from family or friends. (If you are unsure of the amount, provide your best estimate.)

Values less than 100 and greater than 150,000 were replaced with a -6 to indicate the value was out of range.

Applies to: Respondents who took out an undergraduate loan or did not know whether they took out an undergraduate loan.

Instrument code: RBUGLN in (-1 1)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBUGPRIV

Amount borrowed in private undergraduate loans

[If RBUGLAM = -9]

Of the amount you borrowed for your undergraduate education, how much money did you borrow through private student loans?

[else]

Of the \$[RBUGLAM] you borrowed for your undergraduate education, how much money did you borrow through private student loans?

Values less than 100 and greater than 100,000 were replaced with a -6 to indicate the value was out of range.

Applies to: Respondents who took out a private loan or did not know whether they took out an undergraduate loan.

Instrument code: RBUGLN = -1 or RBLNPRI = 1

Recode note: If RBLNPRI = 1 and RBLNFED = 0 and RBLNELSE = 0 then

RBUGPRIV = RBUGLAM

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBUGOWE

Amount owed for undergraduate loans

[If RBUGLAM = -9]

How much of the amount that you borrowed in total undergraduate loans do you still owe? (If you are unsure of the amount, provide your best estimate.)

[else]

How much of the \$[RBUGLAM] in total undergraduate loans do you still owe? (If you are unsure of the amount, provide your best estimate.)

Values greater than 150,000 were replaced with a -6 to indicate the value was out of range.

Applies to: Respondents who took out an undergraduate loan or did not know whether they took out an undergraduate loan.

Instrument code: RBUGLN in (-1 1)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBRPYST

Currently repaying undergraduate loans

Are you currently repaying any educational loans for your undergraduate education? If you are married and your spouse is paying your loans for you, indicate "yes." If someone other than a spouse is paying your loans for you, indicate "no."

0 = No

1 = Yes

Applies to: Respondents who took out an undergraduate loan and owed an amount other than 0 for the loan, or those who did not know whether they took out an undergraduate loan.

Instrument code: RBUGLN in (-1 1) and RBUGOWE ne 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBRPYAMT

Monthly undergraduate loan payment

How much do you pay each month for your undergraduate education loans?

Values greater than 2,000 were replaced with a -6 to indicate the value was out of range.

Applies to: Respondents who took out an undergraduate loan and owed an amount other than 0 for the loan, or those who did not know whether they took out an undergraduate loan.

Instrument code: RBUGLN in (-1 1) and RBUGOWE = 0

Recode note: If RBRPYST = 0 then RBRPYAMT = 0
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNINC

Loan payments: based on yearly income

Are your loan payments...

Based on your yearly income (part of an income based repayment plan)?

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or who were currently repaying undergraduate loans.

Instrument code: RBUGLN = -1 or RBRPYST = 1
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNFGN

Loan payments: paid through a loan forgiveness program

Are your loan payments...

Being paid in whole or part through a loan forgiveness program?

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or who were currently repaying undergraduate loans.

Instrument code: RBUGLN = -1 or RBRPYST = 1
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNHLP

Loan payments: paid by family or friends

Are your loan payments...

Being paid in whole or part by family or friends, not including a spouse?

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or who were currently repaying undergraduate loans.

Instrument code: RBUGLN = -1 or RBRPYST = 1
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBNTPAY

Reason not currently repaying undergraduate loans

What is the status of your loans?

1 = You are participating in a loan forgiveness program

2 = Loans are in forbearance

3 = You or someone else paid (or is paying) back your loans

4 = Loans are in an income-contingent loan repayment plan which does not yet require repayment

5 = Loans are still within 6-month grace period since graduation

6 = Loans are in deferment

7 = Other status not listed

Applies to: Respondents who did not know whether they took out an undergraduate loan or who were not repaying undergraduate loans or had no undergraduate loan amount owed.

Instrument code: RBUGLN = -1 or RBRPYST = 0 or RBUGOWE = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNENR

Loan deferral reason: enrolled at least half-time

Why have you been able to defer repayment of your student loans?

Enrolled at least half-time in a postsecondary school

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or who were not repaying undergraduate loans because the loans were in deferment.

Instrument code: RBUGLN = -1 or RBNTPAY = 6
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNPRO

Loan deferral reason: study in approved program

Why have you been able to defer repayment of your student loans?

Study in an approved graduate fellowship program or in an approved rehabilitation training program for the disabled

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or who were not repaying undergraduate loans because the loans were in deferment.

Instrument code: RBUGLN = -1 or RBNTPAY = 6

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNUNA

Loan deferral reason: unable to find full-time employment

Why have you been able to defer repayment of your student loans?

Unable to find full-time employment

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or who were not repaying undergraduate loans because the loans were in deferment.

Instrument code: RBUGLN = -1 or RBNTPAY = 6

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNECO

Loan deferral reason: experiencing economic hardship

Why have you been able to defer repayment of your student loans?

Experiencing economic hardship (includes Peace Corps Service)

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or who were not repaying undergraduate loans because the loans were in deferment.

Instrument code: RBUGLN = -1 or RBNTPAY = 6

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNSER

Loan deferral reason: teaching or service program

Why have you been able to defer repayment of your student loans?

Participate in a teaching or other service deferment program

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or who were not repaying undergraduate loans because the loans were in deferment.

Instrument code: RBUGLN = -1 or RBNTPAY = 6

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNMIL

Loan deferral reason: on active military duty

Why have you been able to defer repayment of your student loans?

On active military duty

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or who were not repaying undergraduate loans because the loans were in deferment.

Instrument code: RBUGLN = -1 or RBNTPAY = 6

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNOTH

Loan deferral reason: other reason

Why have you been able to defer repayment of your student loans?

Other reason not listed

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or who were not repaying undergraduate loans because the loans were in deferment.

Instrument code: RBUGLN = -1 or RBNTPAY = 6

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNINFL

Undergraduate loan debt influenced employment plans

Has the amount of student loan debt you have from your undergraduate education influenced your employment plans and decisions in any way?

0 = No

1 = Yes

Applies to: Respondents who took out an undergraduate loan or did not know whether they took out an undergraduate loan.

Instrument code: RBUGLN in (-1 1)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNINJB

Undergraduate loan debt influenced employment: took less desirable job

In what ways has your undergraduate student loan debt influenced your employment plans and decisions?

Took less desirable job

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or whose undergraduate loan debt influenced their career plans.

Instrument code: RBUGLN = -1 or RBLNINFL = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNINHR

Undergraduate loan debt influenced employment: had to work more hours

In what ways has your undergraduate student loan debt influenced your employment plans and decisions?

Had to work more hours than desired

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or whose undergraduate loan debt influenced their career plans.

Instrument code: RBUGLN = -1 or RBLNINFL = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNINST

Undergraduate loan debt influenced employment: took job outside field

In what ways has your undergraduate student loan debt influenced your employment plans and decisions?

Took job outside field of study or training to cover the monthly student loan payment

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or whose undergraduate loan debt influenced their career plans.

Instrument code: RBUGLN = -1 or RBLNINFL = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNINMR

Undergraduate loan debt influenced employment: more than one job

In what ways has your undergraduate student loan debt influenced your employment plans and decisions?

Had to work more than one job at the same time

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or whose undergraduate loan debt influenced their career plans.

Instrument code: RBUGLN = -1 or RBLNINFL = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNEDU

Undergraduate loan debt influenced employment: work instead of school

In what ways has your undergraduate student loan debt influenced your employment plans and decisions?

Wanted to go to graduate school but had to work instead

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or whose undergraduate loan debt influenced their career plans.

Instrument code: RBUGLN = -1 or RBLNINFL = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNINOT

Undergraduate loan debt influenced employment: other reasons

In what ways has your undergraduate student loan debt influenced your employment plans and decisions?

Other

0 = No

1 = Yes

Applies to: Respondents who did not know whether they took out an undergraduate loan or whose undergraduate loan debt influenced their career plans.

Instrument code: RBUGLN = -1 or RBLNINFL = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBLNWRTH

Undergraduate loan debt a worthwhile investment

Do you consider your undergraduate student loan debt to be a worthwhile investment in your future?

0 = No

1 = Yes

Applies to: Respondents who took out an undergraduate loan or did not know whether they took out an undergraduate loan.

Instrument code: RBUGLN in (-1 1)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBINCHO

Satisfaction with quality of education at NPSAS

Are you satisfied with the quality of the undergraduate education you received at [NPSAS]?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBMAJCHO

Satisfaction with undergraduate major choice

Are you satisfied with your choice of undergraduate major(s) or course of study?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RBCOBEN

Undergraduate education worth the financial cost

Do you think your undergraduate education was worth its financial cost?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

Section C: Postbaccalaureate Education/Training

RCPSTGRD

Enrolled in any school since earning bachelor's degree

Now we'd like to ask you some questions about any additional education or training you've had since earning your bachelor's degree from [NPSAS]. Have you enrolled in any school for an additional degree or certificate (including enrollment for any graduate and additional undergraduate degree or certificate programs) since earning your bachelor's degree? (If you have been accepted to a school for a degree or certificate program and will be enrolled in the 2009-2010 school year, indicate "yes.")

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCABBUGC

Additional degree since bachelor's: undergraduate certificate

In what additional degree or certificate programs have you been enrolled since earning your bachelor's degree? Undergraduate certificate

0 = No

1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate and completed the abbreviated interview.

Instrument code: RCPSTGRD = 1 and SUMSTFLG in (3 4)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCABBASD

Additional degree since bachelor's: associate's degree

In what additional degree or certificate programs have you been enrolled since earning your bachelor's degree? Associate's degree (AS, AA, etc.)

0 = No

1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate and completed the abbreviated interview.

Instrument code: RCPSTGRD = 1 and SUMSTFLG in (3 4)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCABBACH

Additional degree since bachelor's: additional bachelor's degree

In what additional degree or certificate programs have you been enrolled since earning your bachelor's degree? Additional bachelor's degree (BA, BS, BFA, etc.)

0 = No

1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate and completed the abbreviated interview.

Instrument code: RCPSTGRD = 1 and SUMSTFLG in (3 4)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCABBPBC

Additional degree since bachelor's: postbaccalaureate certificate

In what additional degree or certificate programs have you been enrolled since earning your bachelor's degree? Postbaccalaureate certificate

0 = No

1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate and completed the abbreviated interview.

Instrument code: RCPSTGRD = 1 and SUMSTFLG in (3 4)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCABBMSD

Additional degree since bachelor's: master's degree

In what additional degree or certificate programs have you been enrolled since earning your bachelor's degree? Master's degree (MA, MS, MBA, MFA, MDiv, MAT, etc.)

0 = No

1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate and completed the abbreviated interview.

Instrument code: RCPSTGRD = 1 and SUMSTFLG in (3 4)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCABBPMC

Additional degree since bachelor's: post-master's certificate

In what additional degree or certificate programs have you been enrolled since earning your bachelor's degree? Post-master's certificate

0 = No

1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate and completed the abbreviated interview.

Instrument code: RCPSTGRD = 1 and SUMSTFLG in (3 4)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCABBPRO

Additional degree since bachelor's: professional degree

In what additional degree or certificate programs have you been enrolled since earning your bachelor's degree? Professional degree (only includes the following degree programs: chiropractic, dentistry, law, medicine, optometry, osteopathic medicine, pharmacy, podiatry, ministry or divinity, or veterinary medicine)

0 = No

1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate and completed the abbreviated interview.

Instrument code: RCPSTGRD = 1 and SUMSTFLG in (3 4)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCABBDOC

Additional degree since bachelor's: doctoral degree

In what additional degree or certificate programs have you been enrolled since earning your bachelor's degree? Doctoral degree (PhD, EdD, DBA, etc.)

0 = No

1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate and completed the abbreviated interview.

Instrument code: RCPSTGRD = 1 and SUMSTFLG in (3 4)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCSCH01

[RCSCH01]: name

[If COMPMODE = 0]

What is the name of that school?

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select Foreign Country from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)

2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else]

What is the name of that school, and in what city and state is it located? PLEASE BEAR WITH ME AS I CODE THIS - IT SHOULD JUST TAKE A SECOND.

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate.

Source: B&B:08/09 full scale student interview

RCIPED01

[RCSCH01]: IPEDS number

[If COMPMODE = 0]

What is the name of that school?

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select Foreign Country from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)

2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else]

What is the name of that school, and in what city and state is it located? PLEASE BEAR WITH ME AS I CODE THIS - IT SHOULD JUST TAKE A SECOND.

RCIPED01 is the institution identification number from the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS). May be preloaded from the IPEDS database or provided when the institution is coded using the IPEDS coder in the B&B:08/09 student interview.

IPEDS IDs of 99999* are given to uncodeable schools:

999996 - Foreign school

999997 - City known, school not found

999998 - City unknown

999999 - State unknown

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate.

Source: B&B:08/09 full scale student interview

RCCT01

[RCSCH01]: city

[If COMPMODE = 0]

What is the name of that school?

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select Foreign Country from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)

2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else]

What is the name of that school, and in what city and state is it located? Please bear with me as i code this - it should just take a second.

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate.

Source: B&B:08/09 full scale student interview

RCST01

[RCSCH01]: state

[If COMPMODE = 0]

What is the name of that school?

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select Foreign Country from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)

2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else]

What is the name of that school, and in what city and state is it located? PLEASE BEAR WITH ME AS I CODE THIS - IT SHOULD JUST TAKE A SECOND.

- | | |
|--------------------------|---------------------|
| 1 = Alabama | 31 = New Jersey |
| 2 = Alaska | 32 = New Mexico |
| 3 = Arizona | 33 = New York |
| 4 = Arkansas | 34 = North Carolina |
| 5 = California | 35 = North Dakota |
| 6 = Colorado | 36 = Ohio |
| 7 = Connecticut | 37 = Oklahoma |
| 8 = Delaware | 38 = Oregon |
| 9 = District of Columbia | 39 = Pennsylvania |
| 10 = Florida | 40 = Rhode Island |

- | | |
|--------------------|---------------------------|
| 11 = Georgia | 41 = South Carolina |
| 12 = Hawaii | 42 = South Dakota |
| 13 = Idaho | 43 = Tennessee |
| 14 = Illinois | 44 = Texas |
| 15 = Indiana | 45 = Utah |
| 16 = Iowa | 46 = Vermont |
| 17 = Kansas | 47 = Virginia |
| 18 = Kentucky | 48 = Washington |
| 19 = Louisiana | 49 = West Virginia |
| 20 = Maine | 50 = Wisconsin |
| 21 = Maryland | 51 = Wyoming |
| 22 = Massachusetts | 52 = Puerto Rico |
| 23 = Michigan | 54 = American Samoa |
| 24 = Minnesota | 55 = Guam |
| 25 = Mississippi | 56 = Fed State Micronesia |
| 26 = Missouri | 57 = Marshall Islands |
| 27 = Montana | 58 = Northern Mariana Isl |
| 28 = Nebraska | 59 = Palau |
| 29 = Nevada | 60 = U.S. Virgin Islands |
| 30 = New Hampshire | 63 = Foreign country |

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate.

Source: B&B:08/09 full scale student interview

RCLEVL01

[RCSCH01]: level

[If COMPMODE = 0]

What is the name of that school?

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select Foreign Country from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)

2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else]

What is the name of that school, and in what city and state is it located? PLEASE BEAR WITH ME AS I CODE THIS - IT SHOULD JUST TAKE A SECOND.

- 1 = 4-year
- 2 = 2-year
- 3 = Less-than-2-year

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate.

Source: B&B:08/09 full scale student interview

RCCTRL01

[RCSCH01]: control

[If COMPMODE = 0]

What is the name of that school?

To code your school:

1. Enter all or part of the school name, and its city and state, if known, then click "Search for School" to display a list of matching schools. If your school is outside the U.S. and its territories, select Foreign Country from the state list and click "Search for School." (We do not have schools in foreign countries in our database so we will then collect some additional information from you.)

2. Click on the name of your school in the resulting list. Hints: Do not use abbreviations or acronyms such as ASU for Arizona State University. Entering a school name with the city and state will help to limit the number of schools displayed.

[else]

What is the name of that school, and in what city and state is it located? PLEASE BEAR WITH ME AS I CODE THIS - IT SHOULD JUST TAKE A SECOND.

- 1 = Public
- 2 = Private not-for-profit
- 3 = Private for-profit

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate.

Source: B&B:08/09 full scale student interview

RCCREN01

Currently enrolled at [RCSCH01]

Are you currently enrolled at [RCSCH01] for your degree or certificate program?

- 0 = No
- 1 = Yes
- 2 = I have been accepted to [RCSCH01] and will be enrolled in the 2009-2010 school year (have not yet started taking classes)

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate.

Source: B&B:08/09 full scale student interview

RCDEG01

Postbaccalaureate degree or certificate type 1

[If RCCREN01 = 2]

What degree or certificate will you be working on at [RCSCH01]? (If you will be working on more than one degree or certificate at the same time at [RCSCH01], you can select only one now. You will have an opportunity to tell us about other degrees and certificates at [RCSCH01] later.) (If you will be co-enrolled at [RCSCH01] and another institution, you must indicate only the degree or certificate you will be awarded from [RCSCH01].)

[else if RCCREN01 = 1]

What degree or certificate are you working on at [RCSCH01]? (If you are working on more than one degree or certificate at the same time at [RCSCH01], you can select only one now. You will have an opportunity to

tell us about other degrees and certificates at [RCSCH01] later.) (If you are co-enrolled at [RCSCH01] and another institution, you must indicate only the degree or certificate you will be awarded from [RCSCH01].)

[else]

What degree or certificate were you working on at [RCSCH01]? (If you were working on more than one degree or certificate at the same time at [RCSCH01], you can select only one now. You will have an opportunity to tell us about other degrees and certificates at [RCSCH01] later.) (If you were co-enrolled at [RCSCH01] and another institution, you must indicate only the degree or certificate you were or would have been awarded from [RCSCH01].)

- 1 = Undergraduate certificate
- 2 = Associate's degree (AS, AA, etc.)
- 3 = Additional bachelor's degree (BA, BS, BFA, etc.)
- 4 = Postbaccalaureate certificate
- 5 = Master's degree (MA, MS, MBA, MFA, MDiv, MAT, etc.)
- 6 = Post-master's certificate
- 7 = Professional degree (only includes the following degree programs: chiropractic, dentistry, law, medicine, optometry, osteopathic medicine, pharmacy, podiatry, ministry or divinity, or veterinary medicine)
- 8 = Doctoral degree (PhD, EdD, DBA, etc.)

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate.

Source: B&B:08/09 full scale student interview

RCFEMY01

[RCDEG01]: date first enrolled

[If RCCREN01 = 2]

In what month and year will you first be enrolled for your [RCDEG01]?

[else]

In what month and year were you first enrolled for your [RCDEG01]?

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate.

Source: B&B:08/09 full scale student interview

RCMAJ01

Postbaccalaureate degree 1 primary major: string

[If COMPMODE = 0]

What [if RCCREN01 = 2] will be [else if RCCREN01 = 1] is [else] was] your primary major or field of study for your [RCDEG01] at [RCSCH01]?

Please type your primary major or field of study in the box provided and then click the "Search for Major" button. A list of categories that match your entry will be displayed.

[else]

What [if RCCREN01 = 2] will be [else if RCCREN01 = 1] is [else] was] your primary major or field of study for your [RCDEG01] at [RCSCH01]?

Please bear with me while I code this.

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCMGEN01

Postbaccalaureate degree 1 primary major: general CIP code

[If COMPMODE = 0]

What [if RCCREN01 = 2] will be [else if RCCREN01 = 1] is [else] was] your primary major or field of study for your [RCDEG01] at [RCSCH01]?

Please type your primary major or field of study in the box provided and then click the "Search for Major" button. A list of categories that match your entry will be displayed.

[else]

What [if RCCREN01 = 2] will be [else if RCCREN01 = 1] is [else] was] your primary major or field of study for your [RCDEG01] at [RCSCH01]?

Please bear with me while I code this.

The 2010 Classification of Instructional Programs (CIP) was used to code these data. See

<http://nces.ed.gov/ipeds/cipcode/> for more information on the CIP.

- 1 = Agriculture/operations/related sciences
- 3 = Natural resources and conservation
- 4 = Architecture and related services
- 5 = Area/ethnic/cultural/gender studies
- 9 = Communication, journalism, related
- 10 = Communication technology and support
- 11 = Computer/information science/support
- 12 = Personal and culinary services
- 13 = Education
- 14 = Engineering
- 15 = Engineering technologies/related fields
- 16 = Foreign languages/literature/linguistics
- 19 = Family/consumer sciences/human sciences
- 22 = Legal professions and studies
- 23 = English language and literature/letters
- 24 = Liberal arts/sci/gen studies/humanities
- 25 = Library science
- 26 = Biological and biomedical sciences
- 27 = Mathematics and statistics
- 28 = Reserve officer training (JROTC/ROTC)
- 29 = Military technologies
- 30 = Multi/interdisciplinary studies
- 31 = Parks/recreation/leisure/fitness studies
- 38 = Philosophy and religious studies
- 39 = Theology and religious vocations
- 40 = Physical sciences
- 41 = Science technologies/technicians

- 42 = Psychology
- 43 = Security and protective services
- 44 = Public administration/social service
- 45 = Social sciences
- 46 = Construction trades
- 47 = Mechanic/repair technologies/technicians
- 48 = Precision production
- 49 = Transportation and materials moving
- 50 = Visual and performing arts
- 51 = Health/related clinical sciences
- 52 = Business/management/marketing/related
- 54 = History
- 60 = Residency programs

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCMSPE01

Postbaccalaureate degree 1 primary major: specific CIP code

[If COMPMODE = 0]

What [if RCCREN01 = 2] will be [else if RCCREN01 = 1] is [else] was] your primary major or field of study for your [RCDEG01] at [RCSCH01]?

Please type your primary major or field of study in the box provided and then click the "Search for Major" button. A list of categories that match your entry will be displayed.

[else]

What [if RCCREN01 = 2] will be [else if RCCREN01 = 1] is [else] was] your primary major or field of study for your [RCDEG01] at [RCSCH01]?

Please bear with me while I code this.

All variables in question wording are from the graduate school file where SCHINDEX = 1.

The 2010 Classification of Instructional Programs (CIP) was used to code these data. See

<http://nces.ed.gov/ipeds/cipcode/> for more information on the CIP.

- 01.0000 = Agriculture, general
- 01.0101 = Agricultural business and mgmt, general
- 01.0102 = Agribusiness/agricultural bus operations
- 01.0308 = Agroecology and sustainable agriculture
- 01.0309 = Viticulture and enology
- 01.0601 = Applied horticulture/hort ops, general
- 01.0603 = Ornamental horticulture
- 01.0701 = International agriculture
- 01.0901 = Animal sciences, general
- 01.0904 = Animal nutrition
- 01.1001 = Food science
- 01.1002 = Food technology and processing
- 01.1099 = Food science and technology, other
- 01.1102 = Agronomy and crop science
- 01.1103 = Horticultural science
- 01.1199 = Plant sciences, other

Appendix D. Facsimile of Full-scale Instrument—Section C. Postbaccalaureate Education/Training

- 01.1202 = Soil chemistry and physics
 01.1203 = Soil microbiology
 01.1299 = Soil sciences, other
 01.9999 = Agriculture and related sciences, other
 03.0103 = Environmental studies
 03.0104 = Environmental science
 03.0199 = Natural resources conserv/research other
 03.0201 = Natural resources management and policy
 03.0204 = Natural resource economics
 03.0205 = Water/wetlands/marine resources mgmt
 03.0207 = Natural resource recreation and tourism
 03.0301 = Fishing and fisheries sciences and mgmt
 03.0511 = Forestry technology/technician
 04.0201 = Architecture
 04.0301 = City/urban, community/regional
 planning
 04.0401 = Environmental design/architecture
 04.0501 = Interior architecture
 04.0601 = Landscape architecture
 05.0101 = African studies
 05.0102 = American/U.S. studies/civilization
 05.0104 = East Asian studies
 05.0107 = Latin American studies
 05.0108 = Near and Middle Eastern studies
 05.0109 = Pacific area/Pacific rim studies
 05.0123 = Chinese studies
 05.0201 = African-American/black studies
 05.0299 = Ethnic/minority/gender studies, other
 09.0100 = Communication, general
 09.0101 = Speech communication and rhetoric
 09.0102 = Mass communication/media studies
 09.0199 = Communication/media studies, other
 09.0401 = Journalism
 09.0701 = Radio and television
 09.0702 = Digital
 communication/media/multimedia
 09.0900 = Public relations/advertising
 09.0901 = Organizational communication, general
 09.0902 = Public relations/image management
 09.0903 = Advertising
 09.0905 = Health communication
 09.0906 = Sports communication
 09.0907 = International and intercultural commun
 09.0999 = Public relations/advertising, other
 09.1001 = Publishing
 10.0105 = Communications technology/technician
 10.0201 = Photographic and film/video tech/asst
 10.0202 = Radio and television broadcasting tech
 10.0299 = Audiovisual communications tech, other
 10.0301 = Graphic communications, general
 10.0304 = Animation/interactive tech/video graphic
 10.9999 = Communications tech/support srvcs,
 other
 11.0101 = Computer and info sciences, general
 11.0102 = Artificial intelligence
 11.0103 = Information technology
 11.0104 = Informatics
 11.0199 = Computer and information science, other
 11.0201 = Computer programming/programmer,
 general
 11.0203 = Computer programming vendor/product
 cert
 11.0299 = Computer programming, other
 11.0301 = Data processing and data processing tech
 11.0401 = Information science/studies
 11.0601 = Data entry/microcomputer app, general
 11.0701 = Computer science
 11.0801 = Web page, digital/multimedia/design
 11.0802 = Data model/warehousing/database
 admin
 11.0803 = Computer graphics
 11.0901 = Computer systems networking/telecomm
 11.1001 = Network and system administration
 11.1002 = System, networking, LAN/WAN
 management
 11.1003 = Computer/info systems
 security/assurance
 11.1004 = Web/multimedia
 management/webmaster
 11.1005 = Information technology project mgmt
 11.1006 = Computer support specialist
 11.1099 = Computer/info tech services
 admin/mgmt
 11.9999 = Computer/info sci/support services,
 other
 12.0303 = Mortuary science and
 embalming/embalmer
 12.0401 = Cosmetology/cosmetologist, general
 12.0409 = Aesthetician and skin care specialist
 12.0411 = Permanent cosmetics/makeup/tattooing
 12.0499 = Cosmetology/related grooming, other
 12.0500 = Cooking/related culinary arts, general
 12.0501 = Baking and pastry arts/baker/pastry chef
 12.0503 = Culinary arts/chef training
 12.0504 = Restaurant, culinary, and catering mgmt
 13.0101 = Education, general
 13.0201 = Bilingual and multilingual education
 13.0202 = Multicultural education
 13.0301 = Curriculum and instruction
 13.0401 = Educational leadership/admin, general
 13.0402 = Administration of special education
 13.0403 = Adult/continuing education admin
 13.0404 = Educational/instruct/curric supervision
 13.0406 = Higher education/higher education
 admin
 13.0408 = Elementary/middle school
 admin/principal
 13.0409 = Secondary school admin/principalship
 13.0410 = Urban education and leadership
 13.0411 = Superintendency/educational system
 admin
 13.0499 = Educational admin and supervision, other
 13.0501 = Educational/instructional technology
 13.0601 = Educational evaluation and research

13.0607 = Learning sciences	14.0201 = Aerospace/aeronautical/space engineering
13.0701 = International and comparative education	14.0301 = Agricultural engineering
13.1001 = Special education and teaching, general	14.0501 = Bioengineering/biomedical engineering
13.1003 = Ed/teaching indiv with hearing impair	14.0701 = Chemical engineering
13.1004 = Ed/teaching gifted and talented	14.0801 = Civil engineering, general
13.1005 = Ed/teaching indiv with emotional disturb	14.0802 = Geotechnical and geoenviron engineering
13.1006 = Ed/teaching indiv w mental retardation	14.0803 = Structural engineering
13.1007 = Ed/teaching indiv with mult disabilities	14.0804 = Transportation and highway engineering
13.1011 = Ed/teaching indiv w learning disab	14.0805 = Water resources engineering
13.1012 = Ed/teaching indiv w speech/lang impair	14.0899 = Civil engineering, other
13.1013 = Ed/teaching indiv with autism	14.0901 = Computer engineering, general
13.1015 = Ed/teaching early childhood special ed	14.0902 = Computer hardware engineering
13.1017 = Ed/teaching elementary special ed	14.0903 = Computer software engineering
13.1018 = Ed/teaching middle school special ed	14.0999 = Computer engineering, other
13.1019 = Ed/teaching secondary special ed	14.1001 = Electric/electronics/comm engineering
13.1099 = Special education and teaching, other	14.1003 = Laser and optical engineering
13.1101 = Counselor ed/school counseling/guidance	14.1004 = Telecommunications engineering
13.1102 = College student counsel/personnel srvc	14.1099 = Electric/electronics/comm engin, other
13.1199 = Student counseling/personnel srvc other	14.1101 = Engineering mechanics
13.1201 = Adult/continuing education and teaching	14.1201 = Engineering physics/applied physics
13.1202 = Elementary education and teaching	14.1301 = Engineering science
13.1203 = Junior high/middle school ed/teaching	14.1401 = Environmental/envIRON health engineering
13.1205 = Secondary education and teaching	14.1801 = Materials engineering
13.1206 = Teacher education, multiple levels	14.1901 = Mechanical engineering
13.1207 = Montessori teacher education	14.2301 = Nuclear engineering
13.1210 = Early childhood education/teaching	14.2501 = Petroleum engineering
13.1299 = Teacher ed/prof dev, other level/methods	14.2701 = Systems engineering
13.1301 = Agricultural teacher education	14.3301 = Construction engineering
13.1302 = Art teacher education	14.3501 = Industrial engineering
13.1305 = English/language arts teacher education	14.3701 = Operations research
13.1306 = Foreign language teacher education	14.3901 = Geological/geophysical engineering
13.1307 = Health teacher education	14.4301 = Biochemical engineering
13.1309 = Tech/industrial arts teacher education	14.4501 = Biological/biosystems engineering
13.1311 = Mathematics teacher education	14.9999 = Engineering, other
13.1312 = Music teacher education	15.0101 = Architectural engineering tech
13.1314 = Physical education teaching and coaching	15.0505 = Solar energy technology/technician
13.1315 = Reading teacher education	15.0599 = Environmental control techs, other
13.1316 = Science teacher education	15.0612 = Industrial technology/technician
13.1317 = Social science teacher education	15.0701 = Occupational safety and health tech
13.1318 = Social studies teacher education	15.0799 = Quality control/safety tech, other
13.1322 = Biology teacher education	15.0803 = Automotive engineering tech/technician
13.1323 = Chemistry teacher education	15.1299 = Computer eng tech/technicians, other
13.1326 = German language teacher education	15.1399 = Draft/design engineer tech/technicians
13.1327 = Health occupations teacher education	15.1501 = Engineering/industrial management
13.1328 = History teacher education	16.0103 = Language interpretation and translation
13.1330 = Spanish language teacher education	16.0104 = Comparative literature
13.1331 = Speech teacher education	16.0399 = East Asian lang/lit/ling, other
13.1338 = Environmental education	16.0402 = Russian language and literature
13.1399 = Teacher ed/prof dev, other subject area	16.0801 = Iranian/Persian langs/lit/ling
13.1401 = ESL language instructor	16.0901 = French language and literature
13.1402 = Teach French as a second/foreign lang	16.0905 = Spanish language and literature
13.1502 = Adult literacy tutor/instructor	16.0908 = Hispanic lang/lit/ling, general
13.1599 = Teaching assistants/aides, other	16.1101 = Arabic language and literature
13.9999 = Education, other	16.1200 = Classics langs/lit/ling, general
14.0101 = Engineering, general	16.1601 = American Sign Language (ASL)

Appendix D. Facsimile of Full-scale Instrument—Section C. Postbaccalaureate Education/Training

16.1603 = Sign language interpretation/translation	26.0505 = Parasitology
19.0000 = Work and family studies	26.0506 = Mycology
19.0101 = Family/consumer sci/human sci, general	26.0507 = Immunology
19.0299 = Family/consumer sci/human sci bus, other	26.0599 = Microbiological sci/immunology, other
19.0504 = Human nutrition	26.0701 = Zoology/animal biology
19.0599 = Food, nutrition, related services, other	26.0702 = Entomology
19.0701 = Human development/fam studies, general	26.0709 = Wildlife biology
19.0702 = Adult development and aging	26.0801 = Genetics, general
19.0706 = Child development	26.0802 = Molecular genetics
19.0799 = Human dev/fam studies/related, other	26.0806 = Human/medical genetics
19.9999 = Family/consumer sci/human sci, other	26.0899 = Genetics, other
22.0000 = Legal studies, general	26.0901 = Physiology, general
22.0101 = Law	26.0902 = Molecular physiology
22.0202 = Programs for foreign lawyers	26.0903 = Cell physiology
22.0203 = American/U.S. law/legal studies	26.0907 = Cardiovascular science
22.0207 = Energy/environment/natural resources law	26.0908 = Exercise physiology
22.0208 = Health law	26.0910 = Pathology/experimental pathology
22.0210 = International business/trade/tax law	26.0911 = Oncology and cancer biology
22.0211 = Tax law/taxation	26.0912 = Aerospace physiology and medicine
22.0212 = Intellectual property law	26.0999 = Physiology/pathology/related sci, other
22.0299 = Legal rsrch/advanced prof studies, other	26.1001 = Pharmacology
22.0301 = Legal administrative assistant/secretary	26.1003 = Neuropharmacology
22.0302 = Legal assistant/paralegal	26.1006 = Environmental toxicology
22.9999 = Legal professions and studies, other	26.1102 = Biostatistics
23.0101 = English language and literature, general	26.1103 = Bioinformatics
23.1302 = Creative writing	26.1104 = Computational biology
23.1303 = Professional/business/scientific writing	26.1199 = Biomath, bioinformatics, comp bio, other
23.1399 = Rhetoric/composition/writing, other	26.1201 = Biotechnology
23.1402 = American literature (American)	26.1301 = Ecology
23.1404 = English lit (British and Commonwealth)	26.1302 = Marine biology/biological oceanography
23.9999 = English lang/literature/letters, other	26.1303 = Evolutionary biology
24.0101 = Liberal arts/sciences/liberal studies	26.1307 = Conservation biology
24.0102 = General studies	26.1309 = Epidemiology
24.0103 = Humanities/humanistic studies	26.1310 = Ecology and evolutionary biology
24.0199 = Liberal arts/sci, general studies, other	26.1399 = Ecology/evolution/pop biology, other
25.0101 = Library and information science	26.1401 = Molecular medicine
25.0102 = Children and youth library services	26.1501 = Neuroscience
26.0101 = Biology/biological sciences, general	26.1503 = Neurobiology and anatomy
26.0102 = Biomedical sciences, general	26.1504 = Neurobiology and behavior
26.0202 = Biochemistry	26.1599 = Neurobiology and neurosciences, other
26.0203 = Biophysics	26.9999 = Biological/biomedical sciences, other
26.0204 = Molecular biology	27.0101 = Mathematics, general
26.0210 = Biochemistry and molecular biology	27.0102 = Algebra and number theory
26.0299 = Biochem, biophysics/molecular bio, other	27.0105 = Topologyand foundations
26.0305 = Plant pathology/phytopathology	27.0199 = Mathematics, other
26.0308 = Plant molecular biology	27.0301 = Applied mathematics, general
26.0399 = Botany/plant biology, other	27.0304 = Computational and applied mathematics
26.0401 = Cell/cellular biology and histology	27.0305 = Financial mathematics
26.0403 = Anatomy	27.0399 = Applied mathematics, other
26.0404 = Developmental biology and embryology	27.0501 = Statistics, general
26.0406 = Cell/cellular and molecular biology	27.0599 = Statistics, other
26.0502 = Microbiology, general	28.0602 = Military and strategic leadership
26.0503 = Medical microbiology and bacteriology	28.0699 = National security policy/strategy, other
	29.0299 = Intel/command control/info ops, other
	29.9999 = Military tech/applied sciences, other
	30.0000 = Multi/interdisciplinary studies, general
	30.0501 = Peace studies and conflict resolution

Appendix D. Facsimile of Full-scale Instrument—Section C. Postbaccalaureate Education/Training

30.1001 = Biopsychology	40.0804 = Elementary particle physics
30.1101 = Gerontology	40.0805 = Plasma and high-temperature physics
30.1201 = Historic preservation and conservation	40.0806 = Nuclear physics
30.1401 = Museology/museum studies	40.0807 = Optics/optical sciences
30.1601 = Accounting and computer science	40.0808 = Condensed matter and materials physics
30.1701 = Behavioral sciences	40.0809 = Acoustics
30.1801 = Natural sciences	40.0810 = Theoretical and mathematical physics
30.1901 = Nutrition sciences	40.0899 = Physics, other
30.2001 = International/global studies	40.1001 = Materials science
30.2202 = Classical Mediterranean studies/archaeol	40.1002 = Materials chemistry
30.2301 = Multi/intercultural/diversity studies	40.9999 = Physical sciences, other
30.2601 = Cultural studies/critical theory	41.0000 = Science technologies/technicians general
30.9999 = Multi/interdisciplinary studies, other	41.0301 = Chemical technology/technician
31.0101 = Parks, recreation and leisure studies	41.0399 = Physical science tech, other
31.0501 = Health/physical ed/fitness, general	41.9999 = Science technologies/technicians, other
31.0504 = Sport and fitness administration/mgmt	42.0101 = Psychology, general
31.0505 = Kinesiology and exercise science	42.2701 = Cognitive psychology/psycholinguistics
31.0508 = Sports studies	42.2703 = Developmental and child psychology
31.0599 = Health/physical education/fitness, other	42.2704 = Experimental psychology
38.0001 = Philosophy/religious studies, general	42.2706 = Physiological psychology/psychobiology
38.0101 = Philosophy	42.2707 = Social psychology
38.0201 = Religion/religious studies	42.2708 = Psychometrics/quantitative psychology
38.0203 = Christian studies	42.2799 = Research/experimental psychology, other
38.0206 = Jewish/Judaic studies	42.2801 = Clinical psychology
38.9999 = Philosophy and religious studies, other	42.2802 = Community psychology
39.0201 = Bible/biblical studies	42.2803 = Counseling psychology
39.0501 = Religion/sacred music	42.2804 = Industrial and organizational psychology
39.0601 = Theology/theological studies	42.2805 = School psychology
39.0602 = Divinity/ministry	42.2806 = Educational psychology
39.0699 = Theological/ministerial studies, other	42.2810 = Health/medical psychology
39.0701 = Pastoral studies/counseling	42.2812 = Forensic psychology
39.0702 = Youth ministry	42.2813 = Applied psychology
39.0705 = Lay ministry	42.2814 = Applied behavior analysis
39.0799 = Pastoral counseling/ministries, other	42.2899 = Clinical/counseling/applied psych, other
39.9999 = Theology and religious vocations, other	42.9999 = Psychology, other
40.0101 = Physical sciences	43.0103 = Criminal justice/law enforcement admin
40.0202 = Astrophysics	43.0104 = Criminal justice/safety studies
40.0299 = Astronomy and astrophysics, other	43.0106 = Forensic science and technology
40.0401 = Atmospheric science/meteorology, general	43.0107 = Criminal justice/police science
40.0501 = Chemistry, general	43.0109 = Security and loss prevention services
40.0502 = Analytical chemistry	43.0110 = Juvenile corrections
40.0503 = Inorganic chemistry	43.0111 = Criminalistics and criminal science
40.0504 = Organic chemistry	43.0114 = Law enforcement investig/interviewing
40.0506 = Physical chemistry	43.0115 = Law enforc record-keeping/evidence mgmt
40.0507 = Polymer chemistry	43.0116 = Cyber/comp forensics/counterterrorism
40.0508 = Chemical physics	43.0118 = Law enforcement intelligence analysis
40.0509 = Environmental chemistry	43.0199 = Corrections and criminal justice, other
40.0511 = Theoretical chemistry	43.0203 = Fire science/firefighting
40.0599 = Chemistry, other	43.0299 = Fire protection, other
40.0601 = Geology/earth science, general	43.0301 = Homeland security
40.0602 = Geochemistry	43.0302 = Crisis/emergency/disaster management
40.0603 = Geophysics and seismology	43.0304 = Terrorism/counterterrorism operations
40.0604 = Paleontology	43.9999 = Homeland security/other protective srvcs
40.0605 = Hydrology and water resources science	44.0000 = Human services, general
40.0699 = Geological/earth sciences/geosci, other	44.0201 = Community organization and advocacy
40.0801 = Physics, general	44.0401 = Public administration

Appendix D. Facsimile of Full-scale Instrument—Section C. Postbaccalaureate Education/Training

- 44.0501 = Public policy analysis
44.0503 = Health policy analysis
44.0504 = International public policy analysis
44.0599 = Public policy analysis, other
44.0701 = Social work
44.0799 = Social work, other
44.9999 = Public admin/social service, other
45.0101 = Social science, general
45.0102 = Research methodology and quant methods
45.0201 = Anthropology
45.0202 = Physical and biological anthropology
45.0401 = Criminology
45.0601 = Economics, general
45.0602 = Applied economics
45.0603 = Econometrics and quantitative economics
45.0604 = Development econ/international dvlpmt
45.0605 = International economics
45.0699 = Economics, other
45.0701 = Geography
45.0702 = Geographic info science and cartography
45.0901 = International relations/affairs
45.0902 = National security policy studies
45.0999 = International rel/national security, other
45.1001 = Political science/government, general
45.1002 = American government and politics (U.S.)
45.1099 = Political science and government, other
45.1101 = Sociology
45.1201 = Urban studies/affairs
45.9999 = Social sciences, other
46.0000 = Construction trades, general
46.0302 = Electrician
46.0403 = Building/home/construction inspection
47.0000 = Mechanics and repairers, general
47.0101 = Electric/electron install/repair general
47.0201 = Heating, ac, vent, refrigeration maintnc
47.0404 = Musical instrument fabrication/repair
47.0603 = Autobody/collision and repair tech
47.0604 = Automotive mechanics tech/technician
47.0607 = Airframe mechanics/aircraft maint tech
47.0616 = Marine maint/fitter and ship repair tech
48.0508 = Welding technology/welder
49.0101 = Aeronautics/aviation sci/tech, general
49.0102 = Airline/commercial pilot and flight crew
49.0104 = Aviation/airway management and ops
49.0105 = Air traffic controller
49.0309 = Marine science/merchant marine officer
50.0401 = Design/visual communications, general
50.0407 = Fashion/apparel design
50.0408 = Interior design
50.0409 = Graphic design
50.0501 = Drama/dramatics/theatre arts, general
50.0502 = Technical theatre/design/technology
50.0504 = Playwriting and screenwriting
50.0506 = Acting
50.0601 = Film/cinema/video studies
50.0602 = Cinematography and film/video production
50.0605 = Photography
50.0701 = Art/art studies, general
50.0702 = Fine/studio arts, general
50.0703 = Art history, criticism and conservation
50.0705 = Drawing
50.0706 = Intermedia/multimedia
50.0709 = Sculpture
50.0713 = Metal and jewelry arts
50.0902 = Music history, literature, and theory
50.0903 = Music performance, general
50.0904 = Music theory and composition
50.0905 = Musicology and ethnomusicology
50.0908 = Voice and opera
50.0910 = Jazz/jazz studies
50.0912 = Music pedagogy
50.0913 = Music technology
50.0999 = Music, other
50.1001 = Arts, entertainment, media mgmt, general
50.1002 = Fine and studio arts management
50.1003 = Music management
50.1099 = Arts, entertainment, media mgmt, other
50.9999 = Visual and performing arts, other
51.0000 = Health services/allied health, general
51.0001 = Health and wellness, general
51.0101 = Chiropractic
51.0201 = Communication science/disorders, general
51.0202 = Audiology/audiologist
51.0203 = Speech-language pathology/pathologist
51.0299 = Communication disorders sci/srvcs, other
51.0401 = Dentistry
51.0501 = Dental clinical sciences, general
51.0601 = Dental assisting/assistant
51.0602 = Dental hygiene/hygienist
51.0699 = Dental services and allied professions
51.0701 = Health/health care administration/mgmt
51.0702 = Hospital/health care facil admin/mgmt
51.0703 = Health unit coordinator/ward clerk
51.0705 = Medical office management/administration
51.0706 = Health info/medical records admin
51.0707 = Health info/medical records tech
51.0708 = Medical transcription/transcriptionist
51.0710 = Medical office assistant/specialist
51.0713 = Medical insur coding specialist/coder
51.0717 = Medical staff services tech
51.0718 = Long term care administration/mgmt
51.0801 = Medical/clinical assistant
51.0803 = Occupational therapist assistant
51.0805 = Pharmacy technician/assistant
51.0806 = Physical therapy technician/assistant
51.0808 = Veterinary/animal health tech/assistant
51.0809 = Anesthesiologist assistant
51.0810 = Emergency care attendant (EMT ambulance)

51.0812 = Respiratory therapy tech/assistant	51.2305 = Music therapy/therapist
51.0899 = Allied hlth/medical asst services, other	51.2306 = Occupational therapy/therapist
51.0904 = Emergency medical tech (EMT paramedic)	51.2307 = Orthotist/prosthetist
51.0905 = Nuclear medical technology/technologist	51.2308 = Physical therapy/therapist
51.0906 = Perfusion technology/perfusionist	51.2310 = Vocational rehabilitation counseling
51.0908 = Respiratory care therapy/therapist	51.2314 = Rehabilitation science
51.0909 = Surgical technology/technologist	51.2399 = Rehab/therapeutic professions, other
51.0910 = Diagnostic sonography/ultrasound tech	51.2401 = Veterinary medicine (DVM)
51.0911 = Radiologic tech/science/radiographer	51.2501 = Veterinary sciences, general
51.0912 = Physician assistant	51.2510 = Veterinary preventive medicine/pub hlth
51.0913 = Athletic training/trainer	51.2599 = Veterinary biomed/clinical sci, other
51.0916 = Radiation protection/health physics tech	51.2602 = Home health aide/home attendant
51.0919 = Mammography technician/technology	51.2706 = Medical informatics
51.0920 = Magnetic resonance (MRI) tech	51.3101 = Dietetics/dietitian
51.1002 = Cytotechnology/cytotechnologist	51.3102 = Clinical nutrition/nutritionist
51.1005 = Clinical laboratory science/medical tech	51.3199 = Dietetics/clinical nutrition services
51.1009 = Phlebotomy technician/phlebotomist	51.3301 = Acupuncture and oriental medicine
51.1099 = Clinical/medical lab/allied prof, other	51.3302 = Traditional Chinese medicine/herbology
51.1102 = Pre-medicine/pre-medical studies	51.3303 = Naturopathic medicine/naturopathy
51.1103 = Pre-pharmacy studies	51.3501 = Massage therapy/therapeutic massage
51.1104 = Pre-veterinary studies	51.3602 = Yoga teacher training/yoga therapy
51.1105 = Pre-nursing studies	51.3702 = Herbalism/herbalist
51.1107 = Pre-occupational therapy studies	51.3801 = Nursing/registered nurse
51.1109 = Pre-physical therapy studies	51.3802 = Nursing administration
51.1199 = Health/medical prep programs, other	51.3803 = Adult health nurse/nursing
51.1201 = Medicine	51.3804 = Nurse anesthetist
51.1401 = Medical scientist	51.3805 = Family practice nurse
51.1501 = Substance abuse/addiction counseling	51.3806 = Maternal/child health and neonatal nurse
51.1503 = Clinical/medical social work	51.3807 = Nurse midwife/nursing midwifery
51.1504 = Community health services/counseling	51.3808 = Nursing science
51.1505 = Marriage and family therapy/counseling	51.3809 = Pediatric nurse/nursing
51.1506 = Clinical pastoral/patient counseling	51.3810 = Psychiatric/mental health nurse/nursing
51.1507 = Psychoanalysis and psychotherapy	51.3811 = Public health/community nurse/nursing
51.1508 = Mental health counseling/counselor	51.3812 = Perioperat/operating room/surgical nurse
51.1509 = Genetic counseling/counselor	51.3814 = Critical care nursing
51.1599 = Mental/social health srvc/allied, other	51.3817 = Nursing education
51.1701 = Optometry	51.3818 = Nursing practice
51.1801 = Opticianry/ophthalmic dispensing optic	51.3820 = Clinical nurse leader
51.1901 = Osteopathic medicine/osteopathy	51.3821 = Geriatric nurse/nursing
51.2001 = Pharmacy	51.3899 = Registered nursing admin/research/clinic
51.2010 = Pharmaceutical sciences	51.3901 = Licensed practical/vocat nurse training
51.2099 = Pharmacy/pharmaceutical sci/admin, other	51.3902 = Nurse/nursing aide/patient care asst
51.2101 = Podiatric medicine/podiatry	51.3999 = Practical/vocational nursing/assts other
51.2201 = Public health, general	51.9999 = Health professions/related science other
51.2202 = Environmental health	52.0101 = Business/commerce, general
51.2205 = Health/medical physics	52.0201 = Business admin and management, general
51.2206 = Occupational health/industrial hygiene	52.0202 = Purchasing, procurement/contracts mgmt
51.2207 = Public health education and promotion	52.0203 = Logistics materials/supply chain mgmt
51.2208 = Community health and preventive medicine	52.0204 = Office management and supervision
51.2209 = Maternal and child health	52.0205 = Operations management and supervision
51.2210 = International health/public health	52.0206 = Non-profit/public/organizational mgmt
51.2211 = Health services administration	52.0211 = Project management
51.2299 = Public health, other	52.0213 = Organizational leadership
51.2301 = Art therapy/therapist	52.0299 = Business/managerial operations, other
	52.0301 = Accounting
	52.0304 = Accounting and finance
	52.0305 = Accounting and business/management

- 52.0407 = Business/office automation/data entry
- 52.0501 = Business/corporate communications
- 52.0601 = Business/managerial economics
- 52.0701 = Entrepreneurship/entrepreneurial studies
- 52.0801 = Finance, general
- 52.0804 = Financial planning and services
- 52.0807 = Investments and securities
- 52.0899 = Finance/financial mgmt services, other
- 52.0901 = Hospitality administration/mgmt, general
- 52.0903 = Tourism and travel services management
- 52.1001 = Human resources mgmt/pers admin, general
- 52.1002 = Labor and industrial relations
- 52.1003 = Organizational behavior studies
- 52.1005 = Human resources development
- 52.1099 = Human resources mgmt and services, other
- 52.1101 = International business/trade/commerce
- 52.1201 = Management information systems, general
- 52.1206 = Information resources management
- 52.1299 = Management info systems/services, other
- 52.1301 = Management science
- 52.1399 = Management sci and quant methods, other
- 52.1401 = Marketing/marketing management, general
- 52.1402 = Marketing research
- 52.1403 = International marketing
- 52.1499 = Marketing, other
- 52.1501 = Real estate
- 52.1601 = Taxation
- 52.1701 = Insurance
- 52.1804 = Selling skills and sales operations
- 52.1902 = Fashion merchandising
- 52.1908 = Business/financial srvc marketing ops
- 52.2001 = Construction management
- 52.2101 = Telecommunications management
- 52.9999 = Business, management, marketing, other
- 54.0101 = History, general
- 54.0102 = American history United States
- 54.0103 = European history
- 54.0105 = Public/applied history
- 54.0108 = Military history
- 54.0199 = History, other
- 60.0418 = Nuclear medicine
- 60.0499 = Medical residency gen certificate, other
- 60.0527 = Infectious disease
- 60.0599 = Medical residency, other
- 60.0602 = Podiatric medicine and surgery, 36-month

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCENST01

[RCDEG01]: Enrollment intensity

[If RCCREN01 = 2]

For the period of time you will be enrolled at [RCSCH01] for your [RCDEG01], will you be mainly a full-time or part-time student, or an equal mix of both?

[else if RCCREN01 = 1]

For the period of time you have been enrolled at [RCSCH01] for your [RCDEG01], have you been mainly a full-time or part-time student, or an equal mix of both? [else]

For the period of time you were enrolled at [RCSCH01] for your [RCDEG01], were you mainly a full-time or part-time student, or an equal mix of both?

1 = Full-time

2 = Part-time

3 = Equal mix of full-time and part-time

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate.

Source: B&B:08/09 full scale student interview

RCERN01

[RCDEG01]: earned degree

Have you completed your program of study and received your [RCDEG01] from [RCSCH01]?

0 = No

1 = Yes

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate and were not currently enrolled.

Source: B&B:08/09 full scale student interview

RCEXMY01

[RCDEG01]: date degree expected from [RCSCH01]

In what month and year do you expect to receive your [RCDEG01] from [RCSCH01]?

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate, and were currently enrolled or had future enrollment.

Source: B&B:08/09 full scale student interview

RCEXNC01

[RCDEG01]: no degree expected from [RCSCH01]

In what month and year do you expect to receive your [RCDEG01] from [RCSCH01]?

Do not expect to complete degree at [RCSCH01]

0 = Yes

1 = No

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate, and were currently enrolled or had future enrollment.

Source: B&B:08/09 full scale student interview

RCDGMY01

[RCDEG01]: date degree awarded from [RCSCH01]

In what month and year was your [RCDEG01] awarded by [RCSCH01]?

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate and completed their degree or certificate.

Source: B&B:08/09 full scale student interview

RCOTH01

Enrolled at [RCSCH01] for any other degrees/ coursework

Have you earned or been enrolled at [RCSCH01] for any additional degrees or certificates since earning your bachelor's degree from [NPSAS]? (Indicate "yes" only if the enrollment was for degrees or certificates about which you have not yet told us.)

- 0 = No
- 1 = Yes, currently enrolled in an additional degree or certificate program at [RCSCH01]
- 2 = Yes, will be enrolled in an additional degree or certificate program at [RCSCH01] in the 2009-2010 school year
- 3 = Yes, was enrolled in a different degree or certificate program at [RCSCH01] since earning bachelor's degree

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate.

Source: B&B:08/09 full scale student interview

RCENR01

Enrolled at another school besides [RCSCH01]

Have you enrolled in a degree or certificate program at any other schools besides [RCSCH01] since earning your bachelor's degree at [NPSAS]?

- 0 = No
- 1 = Yes

Applies to: Respondents who enrolled for a postbaccalaureate degree or certificate and was not enrolled for an additional degree or certificate at [RCSCH01].

Source: B&B:08/09 full scale student interview

RCFINSLO

Postbaccalaureate financial aid type: federal student loans

What types of financial aid have you received to help pay for your additional education since earning your bachelor's degree from [NPSAS]?

Federal student loan

- 0 = No
- 1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Instrument code: RCPSTGRD = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCFINBLO

Postbaccalaureate financial aid type: private education/ bank loans

What types of financial aid have you received to help pay for your additional education since earning your bachelor's degree from [NPSAS]?

Private education or bank loan

- 0 = No
- 1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Instrument code: RCPSTGRD = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCFINGR

Postbaccalaureate financial aid type: grants or scholarships

What types of financial aid have you received to help pay for your additional education since earning your bachelor's degree from [NPSAS]?

Grant or scholarship

- 0 = No
- 1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Instrument code: RCPSTGRD = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCFINFEL

Postbaccalaureate financial aid type: fellowships

What types of financial aid have you received to help pay for your additional education since earning your bachelor's degree from [NPSAS]?

Fellowship

- 0 = No
- 1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Instrument code: RCPSTGRD = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCFINTA

Postbaccalaureate financial aid type: teaching assistantship

What types of financial aid have you received to help pay for your additional education since earning your bachelor's degree from [NPSAS]?

Teaching assistantship

- 0 = No
- 1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Instrument code: RCPSTGRD = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCFINRA

Postbaccalaureate financial aid type: research assistantship

What types of financial aid have you received to help pay for your additional education since earning your bachelor's degree from [NPSAS]?

Research assistantship

0 = No

1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Instrument code: RCPSTGRD = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCFINOGA

Postbaccalaureate financial aid type: other graduate assistantship

What types of financial aid have you received to help pay for your additional education since earning your bachelor's degree from [NPSAS]?

Other graduate assistantship

0 = No

1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Instrument code: RCPSTGRD = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCFINETR

Postbaccalaureate financial aid type: employer tuition assistance

What types of financial aid have you received to help pay for your additional education since earning your bachelor's degree from [NPSAS]?

Financial assistance from an employer

0 = No

1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Instrument code: RCPSTGRD = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCFINPL

Postbaccalaureate financial aid type: personal loan or gift

What types of financial aid have you received to help pay for your additional education since earning your bachelor's degree from [NPSAS]?

Personal loan or gift from your family or other individual

0 = No

1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Instrument code: RCPSTGRD = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCFINOTH

Postbaccalaureate financial aid type: other

What types of financial aid have you received to help pay for your additional education since earning your bachelor's degree from [NPSAS]?

Other

0 = No

1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Instrument code: RCPSTGRD = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCFINNON

Postbaccalaureate financial aid type: none

What types of financial aid have you received to help pay for your additional education since earning your bachelor's degree from [NPSAS]?

Did not receive financial aid

0 = No

1 = Yes

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Instrument code: RCPSTGRD = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCFINDK

Postbaccalaureate financial aid type: don't know

What types of financial aid have you received to help pay for your additional education since earning your bachelor's degree from [NPSAS]?

Don't know

0 = Yes

1 = No

Applies to: Respondents who had enrolled for a postbaccalaureate degree or certificate.

Instrument code: RCPSTGRD = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCNDGCWK

Non-degree coursework enrollment

Since earning your bachelor's degree from [NPSAS], have you been enrolled in any coursework that is not part of a degree or certificate program? (If you are not right now, but will be enrolled in any non-degree coursework during the 2009-2010 school year, indicate "yes." Non-degree coursework may be for transfer credit or for recreation or personal enjoyment.)

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCRSEMP

Reason for non-degree coursework: current employment

Why did you decide to take non-degree coursework after earning your bachelor's degree from [NPSAS]?

Needed for current employment

0 = No

1 = Yes

Applies to: Respondents who had enrolled for non-degree postbaccalaureate coursework.

Instrument code: RCNDGCWK = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCRSGOAL

Reason for non-degree coursework: long-term goals

Why did you decide to take non-degree coursework after earning your bachelor's degree from [NPSAS]?

Needed for long-term career goals

0 = No

1 = Yes

Applies to: Respondents who had enrolled for non-degree postbaccalaureate coursework.

Instrument code: RCNDGCWK = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCRSPERS

Reason for non-degree coursework: personal enrichment

Why did you decide to take non-degree coursework after earning your bachelor's degree from [NPSAS]?

Desired for personal enrichment

0 = No

1 = Yes

Applies to: Respondents who had enrolled for non-degree postbaccalaureate coursework.

Instrument code: RCNDGCWK = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCRSOTH

Reason for non-degree coursework: other

Why did you decide to take non-degree coursework after earning your bachelor's degree from [NPSAS]?

Other reason not listed

0 = No

1 = Yes

Applies to: Respondents who had enrolled for non-degree postbaccalaureate coursework.

Instrument code: RCNDGCWK = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCFUTENR

Expect to pursue degree or certificate in future

Do you expect to pursue another degree or certificate in the future?

1 = Definitely yes

2 = Probably yes

3 = Probably not

4 = Definitely not

Applies to: Respondents who had not enrolled for a postbaccalaureate degree or certificate.

Instrument code: RCPSTGRD ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RCGRE

Took graduate or professional entrance exam

Have you taken the GRE or another graduate or professional entrance exam?

0 = No

1 = Yes

Applies to: Respondents who had not enrolled for a postbaccalaureate degree or certificate but expected to pursue a degree or certificate in the future.

Instrument code: RCPSTGRD ne 1 and RCFUTENR in (1 2)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

TCURENR

Current enrollment

TCURENR is an internal variable indicating current enrollment status at any postbaccalaureate school. If [RCCREN0* = 1 at any postbaccalaureate school] then TCURENR = 1; else if SUMSTFLG in (3 4) then TCURENR = -9; else TCURENR = 0

Note: Some partial interviews (SUMSTFLG = 2) did not make it far enough in the interview to determine TCURENR, so their value of TCURENR is a -9 by default.

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

TCURFT

Current enrollment as a full-time student

TCURFT is an internal variable indicating current enrollment as a full-time student. If TCURENR = 1 and ENRSTAT = 1 then TCURFT = 1; else if SUMSTFLG in (3 4) then TCURFT = -9; else TCURFT = 0

Note: Some partial interviews (SUMSTFLG = 2) did not make it far enough in the interview to determine TCURENR, so their value of TCURENR is a -9 by default. TCURENR is also -9 for completed abbreviated interviews (SUMSTFLG in (3 4)).

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

Section D: Postbaccalaureate Employment

RDJSTAT

Working for pay

[If TCURENR = 1]

Are you currently working for pay? Since you are also a student, please indicate "yes" if you are employed in any capacity while enrolled including assistantships and part-time or full-time jobs.

[else]

Are you currently working for pay?(Indicate "yes" if you work full time or part time.)(If you are a teacher on summer break, answer "yes.")

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDEMPTRV

Reason not working for pay: traveling

Are you currently...

Traveling (trip longer than two weeks)?

0 = No

1 = Yes

Applies to: Respondents who were neither currently working for pay nor full-time students.

Instrument code: RDJSTAT ne 1 and TCURFT ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDEMPVOL

Reason not working for pay: volunteering

Are you currently...

Volunteering full-time (Peace Corps, VISTA, etc.)?

0 = No

1 = Yes

Applies to: Respondents who were neither currently working for pay nor full-time students.

Instrument code: RDJSTAT ne 1 and TCURFT ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDEMPHM

Reason not working for pay: homemaker

Are you currently...

A full-time homemaker?

0 = No

1 = Yes

Applies to: Respondents who were neither currently working for pay nor full-time students.

Instrument code: RDJSTAT ne 1 and TCURFT ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDEMPDIS

Reason not working for pay: disabled

Are you currently...

Disabled?

0 = No

1 = Yes

Applies to: Respondents who were neither currently working for pay nor full-time students.

Instrument code: RDJSTAT ne 1 and TCURFT ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDEMPTMP

Reason not working for pay: waiting to report to work or layoff

Are you currently...

Holding a job but waiting to report to work or on temporary leave or temporary layoff from work?

0 = No

1 = Yes

Applies to: Respondents who were neither currently working for pay nor full-time students.

Instrument code: RDJSTAT ne 1 and TCURFT ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDNUMJOB

Number of jobs for pay

How many jobs for pay do you have?

Values greater than 5 were replaced with a -6 to indicate the value was out of range.

0 = 0

1 = 1

2 = 2

3 = 3

4 = 4

5 = 5

Applies to: All respondents.

Recode note: If RDJSTAT = 0 then RDNUMJOB = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDWRKS

Primarily a student or employee while enrolled

Since you are enrolled as a student and also working, would you say you are primarily...

- 1 = A student working to meet expenses
- 2 = An employee who decided to enroll in school

Applies to: Respondents who were currently working for pay and currently enrolled in a degree or certificate program.

Instrument code: RDJSTAT = 1 and TCURENR = 1
 Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDWRKHRS

Hours worked weekly while enrolled

About how many hours per week do you work while enrolled?

Values equal to 0 or greater than 60 were replaced with a -6 to indicate the value was out of range.

Applies to: Respondents who were currently working for pay, currently enrolled in a degree or certificate program, and were primarily a student working to meet expenses.

Instrument code: RDJSTAT = 1 and TCURENR = 1 and RDWRKS not in (-3 2)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDOCC2

Occupation coder: general code

[If COMPMODE = 0 and RDNUMJOB > 1]

Since you have more than one job, please refer to the job at which you work the most hours when answering the next few questions.(If you are a K-12 teacher, tell us about that job.)What is your job title and what do you do in your job? Please enter your job title and duties in the textboxes below and click on the "Search for Occupation" button.

[else if COMPMODE = 0 and RDNUMJOB <= 1]

What is your job title and what do you do in your job? Please enter your job title and duties in the textboxes below and click on the "Search for Occupation" button.

[else if COMPMODE = 1 and RDNUMJOB > 1]

Since you have more than one job, please refer to the job at which you work the most hours when answering the next few questions. What is your job title and what do you do in your job? Please bear with me while I code this.

[else]

What is your job title and what do you do in your job?

Please bear with me while I code this.

- 11 = Management occupations
- 13 = Business/financial operation occupations
- 15 = Computer and mathematical occupations
- 17 = Architecture and engineering occupations
- 19 = Life, physical, soc science occupations

- 21 = Community/social services occupations
- 23 = Legal occupations
- 25 = Education, training, library occupations
- 27 = Arts, design, entertainment, sports, media
- 29 = Healthcare practitioners/technical
- 31 = Healthcare support occupations
- 33 = Protective service occupations
- 35 = Food prep/serving related occupations
- 37 = Building/grounds cleaning/maintenance
- 39 = Personal care and service occupations
- 41 = Sales and related occupations
- 43 = Office/administrative support occupation
- 45 = Farming, fishing, forestry occupations
- 47 = Construction and extraction occupations
- 49 = Installation, maintenance, repair
- 51 = Production occupations
- 53 = Transportation/material moving
- 55 = Military specific occupations

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDOCC3

Occupation coder: detailed code

[If COMPMODE = 0 and RDNUMJOB > 1]

Since you have more than one job, please refer to the job at which you work the most hours when answering the next few questions.(If you are a K-12 teacher, tell us about that job.)What is your job title and what do you do in your job? Please enter your job title and duties in the textboxes below and click on the "Search for Occupation" button.

[else if COMPMODE = 0 and RDNUMJOB <= 1]

What is your job title and what do you do in your job? Please enter your job title and duties in the textboxes below and click on the "Search for Occupation" button.

[else if COMPMODE = 1 and RDNUMJOB > 1]

Since you have more than one job, please refer to the job at which you work the most hours when answering the next few questions. What is your job title and what do you do in your job? Please bear with me while I code this.

[else]

What is your job title and what do you do in your job?

Please bear with me while I code this.

- 111 = Top executives
- 112 = Advertising/marketing/etc. manager
- 113 = Operations specialties manager
- 119 = Other management
- 131 = Business operations specialist
- 132 = Financial specialist
- 151 = Computer specialist
- 152 = Mathematical science
- 171 = Architects, surveyors, and cartographers

172 = Engineers	453 = Fishing and hunting
173 = Drafter/engineering/mapping technician	454 = Forest, conservation, and logging
191 = Life scientists	471 = Supervisors, construction and extraction
192 = Physical scientists	472 = Construction trades
193 = Social scientists and related workers	473 = Helpers, construction trades
194 = Life/physical/social science technician	474 = Other construction and related
211 = Counselor/social worker/other specialist	475 = Extraction
212 = Religious workers	491 = Supervisor, installation, etc.
231 = Lawyers, judges, and related workers	492 = Electrical equipment installer, etc.
232 = Legal support workers	493 = Vehicle/mobile equipment installers, etc.
251 = Postsecondary teacher	499 = Other installation, etc.
252 = Primary/secondary/special ed teacher	511 = Supervisors, production
253 = Other teachers and instructors	512 = Assemblers and fabricators
254 = Librarians, curators, and archivists	513 = Food processing
259 = Other education/training/library	514 = Metal workers and plastic
271 = Art and design workers	515 = Printing
272 = Entertainer/performer/sports/related	516 = Textile, apparel, and furnishings
273 = Media and communication	517 = Woodworkers
274 = Media and communication equipment	518 = Plant and system operators
291 = Health diagnosing/treating practitioner	519 = Other production
292 = Health technologists and technicians	531 = Supervisor, transportation/moving
299 = Other healthcare practitioner/technical	532 = Air transportation
311 = Nursing/psychiatric/home health aide	533 = Motor vehicle operator
312 = Occupational/physical therapist aide	534 = Rail transportation
319 = Other healthcare support	535 = Water transportation
331 = First-line manager, protective service	536 = Other transportation
332 = Fire fighting and prevention	537 = Material moving
333 = Law enforcement	551 = Military officer special/tactical ops
339 = Other protective service	552 = First-line enlisted military supervisor
351 = Supervisor, food preparation and serving	553 = Enlisted tactical ops, air/weapon crew
352 = Cooks and food preparation	
353 = Food and beverage serving	<i>Applies to: Respondents who were currently working for pay.</i>
359 = Other food preparation/serving related	<i>Instrument code: RDJSTAT = 1</i>
371 = Supervisor, building/grounds maintenance	Perturbation procedures were applied to this and other
372 = Building cleaning and pest control	variables to protect against disclosure of individual
373 = Grounds maintenance	information.
391 = Supervisor, personal care and service	Source: B&B:08/09 full scale student interview
392 = Animal care and service	
393 = Entertainment attendants and related	
394 = Funeral service	
395 = Personal appearance	
396 = Transportation/tourism/lodging attendant	
399 = Other personal care and service	
411 = Supervisors, sales	
412 = Retail sales	
413 = Sales representative, services	
414 = Sales representative, wholesale, etc.	
419 = Other sales and related	
431 = Supervisor, office/administrative	
432 = Communications equipment operators	
433 = Financial clerks	
434 = Information and record clerks	
435 = Material recording, scheduling, etc.	
436 = Secretaries and administrative assistant	
439 = Other office and administrative support	
451 = Supervisor, farming/fishing/forestry	
452 = Agricultural	

RDOCC6

Occupation coder: specific code

[If COMPMODE = 0 and RDNUMJOB > 1]

Since you have more than one job, please refer to the job at which you work the most hours when answering the next few questions. (If you are a K-12 teacher, tell us about that job.) What is your job title and what do you do in your job? Please enter your job title and duties in the textboxes below and click on the "Search for Occupation" button.

[else if COMPMODE = 0 and RDNUMJOB <= 1]

What is your job title and what do you do in your job? Please enter your job title and duties in the textboxes below and click on the "Search for Occupation" button.

[else if COMPMODE = 1 and RDNUMJOB > 1]

Since you have more than one job, please refer to the job at which you work the most hours when answering the next few questions. What is your job title and what do you do in your job? Please bear with me while I code this.

Appendix D. Facsimile of Full-scale Instrument—Section D. Postbaccalaureate Employment

[else]

What is your job title and what do you do in your job?

Please bear with me while I code this.

111011 = Chief executives
111021 = General and operations managers
111031 = Legislators
112011 = Advertising and promotions managers
112021 = Marketing managers
112022 = Sales managers
112031 = Public relations managers
113011 = Administrative services managers
113021 = Computer and info systems managers
113031 = Financial managers
113041 = Compensation and benefits managers
113042 = Training and development managers
113049 = Human resources managers, all other
113051 = Industrial production managers
113061 = Purchasing managers
113071 = Transportation, storage, etc. manager
119011 = Farm/ranch/other agricultural managers
119012 = Farmers and ranchers
119021 = Construction managers
119031 = Ed administrator, preschool/child care
119032 = Ed administrator, elementary/secondary
119033 = Education administrators, postsecondary
119039 = Education administrators, all other
119041 = Engineering managers
119051 = Food service managers
119061 = Funeral directors
119071 = Gaming managers
119081 = Lodging managers
119111 = Medical and health services managers
119121 = Natural sciences managers
119131 = Postmasters and mail superintendents
119141 = Property, real estate, etc. managers
119151 = Social and community service managers
119199 = Managers, all other
131011 = Agent/business manager of performers
131021 = Purchasing agent/buyer, farm products
131022 = Wholesale/retail buyer, except farm
131023 = Purchasing agent, except wholesale
131031 = Claims adjuster, examiner, investigator
131032 = Insurance appraisers, auto damage
131041 = Compliance officer (not agriculture)
131051 = Cost estimators
131061 = Emergency management specialists
131071 = Employment, recruitment, specialist
131072 = Compensation, benefits, specialist
131073 = Training and development specialists
131079 = HR/training/specialists, all other
131081 = Logisticians
131111 = Management analysts
131121 = Meeting and convention planners
131199 = Business ops specialists, all other
132011 = Accountants and auditors
132021 = Appraisers and assessors of real estate
132031 = Budget analysts

132041 = Credit analysts
132051 = Financial analysts
132052 = Personal financial advisors
132053 = Insurance underwriters
132061 = Financial examiners
132071 = Loan counselors
132072 = Loan officers
132081 = Tax examiner, collector, revenue agent
132082 = Tax preparers
132099 = Financial specialists, all other
151011 = Computer and info scientist, research
151021 = Computer programmers
151031 = Computer software engineer, applications
151032 = Computer software engineer, systems
151041 = Computer support specialists
151051 = Computer systems analysts
151061 = Database administrators
151071 = Network/computer systems administrator
151081 = Network system/data analyst
151099 = Computer specialists, all other
152011 = Actuaries
152021 = Mathematicians
152031 = Operations research analysts
152041 = Statisticians
152091 = Mathematical technicians
152099 = Mathematical scientists, all other
171011 = Architects, except landscape and naval
171012 = Landscape architects
171021 = Cartographers and photogrammetrists
171022 = Surveyors
172011 = Aerospace engineers
172021 = Agricultural engineers
172031 = Biomedical engineers
172041 = Chemical engineers
172051 = Civil engineers
172061 = Computer hardware engineers
172071 = Electrical engineers
172072 = Electronics engineers, except computer
172081 = Environmental engineers
172111 = Health/safety engineer, except mining
172112 = Industrial engineers
172121 = Marine engineers and naval architects
172131 = Materials engineers
172141 = Mechanical engineers
172151 = Geological engineer, including mining
172161 = Nuclear engineers
172171 = Petroleum engineers
172199 = Engineers, all other
173011 = Architectural and civil drafters
173012 = Electrical and electronics drafters
173013 = Mechanical drafters
173019 = Drafters, all other
173021 = Aerospace engineer/ops technicians
173022 = Civil engineering technicians
173023 = Electrical engineering technicians
173024 = Electro-mechanical technicians
173025 = Environmental engineering technicians

Appendix D. Facsimile of Full-scale Instrument—Section D. Postbaccalaureate Employment

173026 = Industrial engineering technicians	211029 = Social workers, all other
173027 = Mechanical engineering technicians	211091 = Health educators
173029 = Engineering tech, other (except drafter)	211092 = Probation officer/correctional treatment
173031 = Surveying and mapping technicians	211093 = Social and human service assistants
191011 = Animal scientists	211099 = Community/social specialist, other
191012 = Food scientists and technologists	212011 = Clergy
191013 = Soil and plant scientists	212021 = Director, religious activities, and edu
191021 = Biochemists and biophysicists	212099 = Religious workers, all other
191022 = Microbiologists	231011 = Lawyers
191023 = Zoologists and wildlife biologists	231021 = Administrative law judge, etc.
191029 = Biological scientists, all other	231022 = Arbitrators, mediators, and conciliators
191031 = Conservation scientists	231023 = Judge, magistrate judge, magistrate
191032 = Foresters	232011 = Paralegals and legal assistants
191041 = Epidemiologists	232091 = Court reporters
191042 = Medical scientist, except epidemiologist	232092 = Law clerks
191099 = Life scientists, all other	232093 = Title examiner, abstractor, and searcher
192011 = Astronomers	232099 = Legal support workers, all other
192012 = Physicists	251011 = Business teachers, postsecondary
192021 = Atmospheric and space scientists	251021 = Computer science teachers, postsecondary
192031 = Chemists	251022 = Mathematical science, postsecondary
192032 = Materials scientists	251031 = Architecture teachers, postsecondary
192041 = Environmental scientist, includes health	251032 = Engineering teachers, postsecondary
192042 = Geoscientist, except hydrologists	251041 = Agricultural science, postsecondary
192043 = Hydrologists	251042 = Biological science, postsecondary
192099 = Physical scientists, all other	251043 = Forestry/conservation sci, postsecondary
193011 = Economists	251051 = Atmospheric science, postsecondary
193021 = Market research analysts	251052 = Chemistry teachers, postsecondary
193022 = Survey researchers	251053 = Environmental science, postsecondary
193031 = Clinical/counseling/school psychologist	251054 = Physics teachers, postsecondary
193032 = Industrial-organizational psychologists	251061 = Anthropology/archeology, postsecondary
193039 = Psychologists, all other	251062 = Area/ethnic/cultural, postsecondary
193041 = Sociologists	251063 = Economics teachers, postsecondary
193051 = Urban and regional planners	251064 = Geography teachers, postsecondary
193091 = Anthropologists and archeologists	251065 = Political science, postsecondary
193092 = Geographers	251066 = Psychology teachers, postsecondary
193093 = Historians	251067 = Sociology teachers, postsecondary
193094 = Political scientists	251069 = Social science, postsecondary, all other
193099 = Social scientist and related, other	251071 = Health specialties, postsecondary
194011 = Agricultural and food science technician	251072 = Nurse instructor/teacher, postsecondary
194021 = Biological technicians	251081 = Education teachers, postsecondary
194031 = Chemical technicians	251082 = Library science teachers, postsecondary
194041 = Geological and petroleum technicians	251111 = Criminal justice, etc., postsecondary
194051 = Nuclear technicians	251112 = Law teachers, postsecondary
194061 = Social science research assistants	251113 = Social work teachers, postsecondary
194091 = Environmental/protection science tech	251121 = Art, drama, and music, postsecondary
194092 = Forensic science technicians	251122 = Communications teachers, postsecondary
194093 = Forest and conservation technicians	251123 = English lang/literature, postsecondary
194099 = Life/physical technician, other	251124 = Foreign lang/literature, postsecondary
211011 = Substance abuse/behavioral counselors	251125 = History teachers, postsecondary
211012 = Ed, vocational, and school counselors	251126 = Philosophy and religion, postsecondary
211013 = Marriage and family therapists	251191 = Graduate teaching assistants
211014 = Mental health counselors	251192 = Home economics teachers, postsecondary
211015 = Rehabilitation counselors	251193 = Recreation/fitness, postsecondary
211019 = Counselors, all other	251194 = Vocational education, postsecondary
211021 = Child, family, and school social workers	251199 = Postsecondary teachers, all other
211022 = Medical and public health social workers	252011 = Preschool teacher, except special ed
211023 = Mental health/substance social worker	252012 = Kindergarten teacher, except special ed

Appendix D. Facsimile of Full-scale Instrument—Section D. Postbaccalaureate Employment

252021 = Elementary teacher, except special ed	274014 = Sound engineering technicians
252022 = Middle teacher, except special/voc	274021 = Photographers
252023 = Vocational ed teacher, middle	274031 = Camera operator/TV/video/motion picture
252031 = Secondary teacher, except special/voc ed	274032 = Film and video editors
252032 = Vocational ed teacher, secondary	274099 = Media/communication equipment, all other
252041 = Special ed teacher, pre-k/k/elementary	291011 = Chiropractors
252042 = Special ed teacher, middle	291021 = Dentists, general
252043 = Special ed teacher, secondary	291022 = Oral and maxillofacial surgeons
253011 = Adult literacy/remedial ed/GED teacher	291023 = Orthodontists
253021 = Self-enrichment education teachers	291024 = Prosthodontists
253099 = Teachers and instructors, all other	291029 = Dentists, all other specialists
254011 = Archivists	291031 = Dietitians and nutritionists
254012 = Curators	291041 = Optometrists
254013 = Museum technicians and conservators	291051 = Pharmacists
254021 = Librarians	291061 = Anesthesiologists
254031 = Library technicians	291062 = Family and general practitioners
259011 = Audio-visual collections specialists	291063 = Internists, general
259021 = Farm and home management advisors	291064 = Obstetricians and gynecologists
259031 = Instructional coordinators	291065 = Pediatricians, general
259041 = Teacher assistants	291066 = Psychiatrists
259099 = Ed/training/library worker, all other	291067 = Surgeons
271011 = Art directors	291069 = Physicians and surgeons, all other
271012 = Craft artists	291071 = Physician assistants
271013 = Fine artist, including painter, etc.	291081 = Podiatrists
271014 = Multi-media artists and animators	291111 = Registered nurses
271019 = Artists and related workers, all other	291121 = Audiologists
271021 = Commercial and industrial designers	291122 = Occupational therapists
271022 = Fashion designers	291123 = Physical therapists
271023 = Floral designers	291124 = Radiation therapists
271024 = Graphic designers	291125 = Recreational therapists
271025 = Interior designers	291126 = Respiratory therapists
271026 = Merchandise displayer/window trimmer	291127 = Speech-language pathologists
271027 = Set and exhibit designers	291129 = Therapists, all other
271029 = Designers, all other	291131 = Veterinarians
272011 = Actors	291199 = Health diagnosing practitioner, other
272012 = Producers and directors	292011 = Medical/clinical laboratory technologist
272021 = Athletes and sports competitors	292012 = Medical/clinical laboratory technician
272022 = Coaches and scouts	292021 = Dental hygienists
272023 = Umpire/referee/other sports official	292031 = Cardiovascular technologist/technician
272031 = Dancers	292032 = Diagnostic medical sonographers
272032 = Choreographers	292033 = Nuclear medicine technologists
272041 = Music directors and composers	292034 = Radiologic technologists and technicians
272042 = Musicians and singers	292041 = Emergency medical technician/paramedic
272099 = Entertainer/performer/sports, other	292051 = Dietetic technicians
273011 = Radio and television announcers	292052 = Pharmacy technicians
273012 = Public address system/other announcer	292053 = Psychiatric technicians
273021 = Broadcast news analysts	292054 = Respiratory therapy technicians
273022 = Reporters and correspondents	292055 = Surgical technologists
273031 = Public relations specialists	292056 = Veterinary technologists and technicians
273041 = Editors	292061 = Licensed practical/vocational nurse
273042 = Technical writers	292071 = Medical records/health info technician
273043 = Writers and authors	292081 = Opticians, dispensing
273091 = Interpreters and translators	292091 = Orthotists and prosthetists
273099 = Media/communication worker, all other	292099 = Health technologist/technician, other
274011 = Audio and video equipment technicians	299011 = Occupational health/safety specialist
274012 = Broadcast technicians	
274013 = Radio operators	

Appendix D. Facsimile of Full-scale Instrument—Section D. Postbaccalaureate Employment

299012 = Occupational health/safety technician	371011 = First-line manager, housekeeping/janitor
299091 = Athletic trainers	371012 = First-line manager, landscaping, etc.
299099 = Health technologist/technician, other	372011 = Janitor/cleaner, except maid/housekeeper
311011 = Home health aides	372012 = Maids and housekeeping cleaners
311012 = Nursing aides, orderlies, and attendants	372019 = Building cleaning workers, all other
311013 = Psychiatric aides	372021 = Pest control workers
312011 = Occupational therapist assistants	373011 = Landscaping and groundskeeping workers
312012 = Occupational therapist aides	373012 = Pesticide handler/sprayer/vegetation etc.
312021 = Physical therapist assistants	373013 = Tree trimmers and pruners
312022 = Physical therapist aides	373019 = Grounds maintenance workers, all other
319011 = Massage therapists	391011 = Gaming supervisors
319091 = Dental assistants	391012 = Slot key persons
319092 = Medical assistants	391021 = First-line manager, personal service
319093 = Medical equipment preparers	392011 = Animal trainers
319094 = Medical transcriptionists	392021 = Nonfarm animal caretakers
319095 = Pharmacy aides	393011 = Gaming dealers
319096 = Veterinary assistant/lab animal care	393012 = Gaming and sports book writer/runner
319099 = Healthcare support workers, all other	393019 = Gaming service workers, all other
331011 = First-line manager, correctional officer	393021 = Motion picture projectionists
331012 = First-line manager, police/detectives	393031 = Usher, lobby attendant, and ticket taker
331021 = First-line manager, fire fighting, etc.	393091 = Amusement and recreation attendants
331099 = First-line manager, protective, other	393092 = Costume attendants
332011 = Fire fighters	393093 = Locker/coat/dressing room attendant
332021 = Fire inspectors and investigators	393099 = Entertainment attendants and related
332022 = Forest fire/prevention specialist	394011 = Embalmers
333011 = Bailiffs	394021 = Funeral attendants
333012 = Correctional officers and jailers	395011 = Barbers
333021 = Detectives and criminal investigators	395012 = Hairdresser, hairstylist, cosmetologist
333031 = Fish and game wardens	395091 = Makeup artist, theatrical/performance
333041 = Parking enforcement workers	395092 = Manicurists and pedicurists
333051 = Police and sheriff's patrol officers	395093 = Shampooers
333052 = Transit and railroad police	395094 = Skin care specialists
339011 = Animal control workers	396011 = Baggage porters and bellhops
339021 = Private detectives and investigators	396012 = Concierges
339031 = Gaming surveillance officer/investigator	396021 = Tour guides and escorts
339032 = Security guards	396022 = Travel guides
339091 = Crossing guards	396031 = Flight attendants
339092 = Lifeguard/ski patrol/other service	396032 = Transportation attendant, except flight
339099 = Protective service workers, all other	399011 = Child care workers
351011 = Chefs and head cooks	399021 = Personal and home care aides
351012 = First-line manager, food prep/serving	399031 = Fitness trainer and aerobics instructor
352011 = Cooks, fast food	399032 = Recreation workers
352012 = Cooks, institution and cafeteria	399041 = Residential advisors
352013 = Cooks, private household	399099 = Personal care/service workers, all other
352014 = Cooks, restaurant	411011 = First-line manager, retail sales
352015 = Cooks, short order	411012 = First-line manager, non-retail sales
352019 = Cooks, all other	412011 = Cashiers
352021 = Food preparation workers	412012 = Gaming change persons and booth cashiers
353011 = Bartenders	412021 = Counter and rental clerks
353021 = Food prep/serving, includes fast food	412022 = Parts salespersons
353022 = Counter attendant, cafeteria, etc.	412031 = Retail salespersons
353031 = Waiters and waitresses	413011 = Advertising sales agents
353041 = Food servers, nonrestaurant	413021 = Insurance sales agents
359011 = Dining room/cafeteria attendant, etc.	413031 = Securities, commodities, etc. agent
359021 = Dishwashers	413041 = Travel agents
359031 = Host/hostess, restaurant, etc.	413099 = Sales representatives, services, other
359099 = Food prep/serving related, other	

Appendix D. Facsimile of Full-scale Instrument—Section D. Postbaccalaureate Employment

414011 = Sales rep, wholesale, technical	439021 = Data entry keyers
414012 = Sales rep, wholesale, except technical	439022 = Word processors and typists
419011 = Demonstrators and product promoters	439031 = Desktop publishers
419012 = Models	439041 = Insurance claims/policy processing clerk
419021 = Real estate brokers	439051 = Mail clerk/machine op, except postal
419022 = Real estate sales agents	439061 = Office clerks, general
419031 = Sales engineers	439071 = Office machine operator, except computer
419041 = Telemarketers	439081 = Proofreaders and copy markers
419091 = Door-to-door sales, etc., related	439111 = Statistical assistants
419099 = Sales and related workers, all other	439199 = Office/admin support worker, other
431011 = First-line manager, office/admin support	451011 = First-line manager, farming/fishing/etc.
432011 = Switchboard operator, includes answering	451012 = Farm labor contractors
432021 = Telephone operators	452011 = Agricultural inspectors
432099 = Communications equipment operator, other	452021 = Animal breeders
433011 = Bill and account collectors	452041 = Grader/sorter, agricultural products
433021 = Billing/posting clerk/machine operator	452091 = Agricultural equipment operators
433031 = Bookkeeping/accounting/auditing clerk	452092 = Farmworker/laborer: crop, nursery, etc.
433041 = Gaming cage workers	452093 = Farmworkers, farm and ranch animals
433051 = Payroll and timekeeping clerks	452099 = Agricultural workers, all other
433061 = Procurement clerks	453011 = Fishers and related fishing workers
433071 = Tellers	453021 = Hunters and trappers
434011 = Brokerage clerks	454011 = Forest and conservation workers
434021 = Correspondence clerks	454021 = Fallers
434031 = Court, municipal, and license clerks	454022 = Logging equipment operators
434041 = Credit authorizers, checkers, and clerks	454023 = Log graders and scalers
434051 = Customer service representatives	454029 = Logging workers, all other
434061 = Eligibility interviewer, govt program	471011 = First-line manager, construction, etc.
434071 = File clerks	472011 = Boilermakers
434081 = Hotel, motel, and resort desk clerks	472021 = Brickmasons and blockmasons
434111 = Interviewer, except eligibility/loan	472022 = Stonemasons
434121 = Library assistants, clerical	472031 = Carpenters
434131 = Loan interviewers and clerks	472041 = Carpet installers
434141 = New accounts clerks	472042 = Floor layer, except carpet/wood/etc.
434151 = Order clerks	472043 = Floor sanders and finishers
434161 = HR assistant, except payroll/timekeeping	472044 = Tile and marble setters
434171 = Receptionists and information clerks	472051 = Cement masons and concrete finishers
434181 = Reservation/transportation ticket agent	472053 = Terrazzo workers and finishers
434199 = Information and record clerks, all other	472061 = Construction laborers
435011 = Cargo and freight agents	472071 = Paving/surfacing/etc. equipment operator
435021 = Couriers and messengers	472072 = Pile-driver operators
435031 = Police, fire, and ambulance dispatchers	472073 = Operating engineer, other operator
435032 = Dispatcher, except police/fire/ambulance	472081 = Drywall and ceiling tile installers
435041 = Meter readers, utilities	472082 = Tapers
435051 = Postal service clerks	472111 = Electricians
435052 = Postal service mail carriers	472121 = Glaziers
435053 = Postal mail sorter, processor, etc.	472131 = Insulation workers, floor/ceiling/wall
435061 = Production, planning, expediting clerk	472132 = Insulation workers, mechanical
435071 = Shipping, receiving, and traffic clerks	472141 = Painters, construction and maintenance
435081 = Stock clerks and order fillers	472142 = Paperhangers
435111 = Weigher/measurer/sampler, recordkeeping	472151 = Pipelayers
436011 = Executive secretary/admin assistant	472152 = Plumbers, pipefitters, and steamfitters
436012 = Legal secretaries	472161 = Plasterers and stucco masons
436013 = Medical secretaries	472171 = Reinforcing iron and rebar workers
436014 = Secretary, except legal/medical/exec	472181 = Roofers
439011 = Computer operators	472211 = Sheet metal workers
	472221 = Structural iron and steel workers
	473011 = Helpers, brickmason/blockmason/etc.

473012 = Helpers, carpenters	499012 = Control/valve installer, except door
473013 = Helpers, electricians	499021 = Heating, air conditioning, etc. mechanic
473014 = Helpers, painter/paperhanger/etc.	499031 = Home appliance repairers
473015 = Helpers, pipelayer/plumber/etc.	499041 = Industrial machinery mechanics
473016 = Helpers, roofers	499042 = Maintenance and repair workers, general
473019 = Helpers, construction trades, all other	499043 = Maintenance workers, machinery
474011 = Construction and building inspectors	499044 = Millwrights
474021 = Elevator installers and repairers	499045 = Refractory repairer, except brickmason
474031 = Fence erectors	499051 = Electrical power-line installer/repairer
474041 = Hazardous materials removal workers	499052 = Telecommunication line installer
474051 = Highways maintenance workers	499061 = Camera/photographic equipment repairer
474061 = Rail laying/maintenance equipment op	499062 = Medical equipment repairers
474071 = Septic tank servicer/sewer pipe cleaner	499063 = Musical instrument repairers and tuners
474091 = Segmental pavers	499064 = Watch repairers
474099 = Construction/related workers, other	499069 = Precision instrument/etc. repairer, other
475011 = Derrick operators, oil and gas	499091 = Coin/vending/etc. machine servicer
475012 = Rotary drill operators, oil and gas	499092 = Commercial divers
475013 = Service unit operators, oil/gas/mining	499093 = Fabric menders, except garment
475021 = Earth drillers, except oil and gas	499094 = Locksmiths and safe repairers
475031 = Explosives worker, blaster, etc.	499095 = Manufactured bldng/mobile home installer
475041 = Continuous mining machine operators	499096 = Riggers
475042 = Mine cutting/channeling machine operator	499097 = Signal and track switch repairers
475049 = Mining machine operators, all other	499098 = Helper, installation/maintenance/repair
475051 = Rock splitters, quarry	499099 = Installation/maintenance/repair, other
475061 = Roof bolters, mining	511011 = First-line manager, production/operating
475071 = Roustabouts, oil and gas	512011 = Aircraft structure/surface/etc. assembler
475081 = Helpers, extraction workers	512021 = Coil winders, tapers, and finishers
475099 = Extraction workers, all other	512022 = Electrical equipment assembler
491011 = First-line manager, mechanic, etc.	512023 = Electromechanical equipment assemblers
492011 = Computer, automated teller, etc. repairer	512031 = Engine and other machine assemblers
492021 = Radio mechanics	512041 = Structural metal fabricators and fitters
492022 = Telecommunication installer, except line	512091 = Fiberglass laminators and fabricators
492091 = Avionics technicians	512092 = Team assemblers
492092 = Electric motor/power tool/other repairer	512093 = Timing device assembler/adjuster/etc.
492093 = Electrical installer, transportation	512099 = Assemblers and fabricators, all other
492094 = Electrical repairer, commercial, etc.	513011 = Bakers
492095 = Electrical repairer, powerhouse, etc.	513021 = Butchers and meat cutters
492096 = Electronic installer, motor vehicles	513022 = Meat/poultry/fish cutter/trimmer
492097 = Electronic home entertainment installer	513023 = Slaughterers and meat packers
492098 = Security/fire alarm systems installer	513091 = Food/tobacco roasting machine operator
493011 = Aircraft mechanic/service technician	513092 = Food batchmakers
493021 = Automotive body and related repairers	513093 = Food cooking machine operator/tender
493022 = Automotive glass installer/repairer	514011 = Computer machine operator, metal/plastic
493023 = Automotive service technician/mechanic	514012 = Numerical tool/process programmer
493031 = Bus/truck mechanic, diesel specialist	514021 = Drawing machine setter, metal/plastic
493041 = Farm equipment mechanics	514022 = Forging machine setter, metal/plastic
493042 = Mobile equipment mechanic, except engine	514023 = Rolling machine setter, metal/plastic
493043 = Rail car repairers	514031 = Cutting machine setter, metal/plastic
493051 = Motorboat mechanics	514032 = Drilling machine setter, metal/plastic
493052 = Motorcycle mechanics	514033 = Grinding machine setter, metal/plastic
493053 = Outdoor power equipment/etc. mechanic	514034 = Lathe machine setter, metal/plastic
493091 = Bicycle repairers	514035 = Milling machine setter, metal/plastic
493092 = Recreational vehicle service technicians	514041 = Machinists
493093 = Tire repairers and changers	514051 = Metal-refining furnace operator/tender
499011 = Mechanical door repairers	514052 = Pourers and casters, metal

Appendix D. Facsimile of Full-scale Instrument—Section D. Postbaccalaureate Employment

514061 = Model makers, metal and plastic	519041 = Extruding machine setter
514062 = Patternmakers, metal and plastic	519051 = Furnace/kiln/oven/etc. operator
514071 = Foundry mold and coremakers	519061 = Inspector/tester/sorter/sampler/weigher
514072 = Molding machine setter, metal/plastic	519071 = Jeweler/precious stone/metal workers
514081 = Multiple machine setter, metal/plastic	519081 = Dental laboratory technicians
514111 = Tool and die makers	519082 = Medical appliance technicians
514121 = Welders, cutters, solderers, and brazers	519083 = Ophthalmic laboratory technicians
514122 = Welding machine setter/operator	519111 = Packaging/filling machine operator
514191 = Heat treating setter, metal/plastic	519121 = Coating/painting/spraying machine setter
514192 = Lay-out workers, metal and plastic	519122 = Painters, transportation equipment
514193 = Plating machine setter, metal/plastic	519123 = Painting, coating, and decorating worker
514194 = Tool grinders, filers, and sharpeners	519131 = Photographic process workers
514199 = Metal/plastic worker, all other	519132 = Photographic processing machine operator
515011 = Bindery workers	519141 = Semiconductor processors
515012 = Bookbinders	519191 = Cementing and gluing machine operator
515021 = Job printers	519192 = Cleaning/washing/etc. equipment operator
515022 = Prepress technicians and workers	519193 = Cooling/freezing equipment operator
515023 = Printing machine operators	519194 = Etchers and engravers
516011 = Laundry and dry-cleaning workers	519195 = Molder/shaper/etc., except metal/plastic
516021 = Presser, textile/garment/etc.	519196 = Paper goods machine setter
516031 = Sewing machine operators	519197 = Tire builders
516041 = Shoe and leather workers and repairers	519198 = Helpers, production workers
516042 = Shoe machine operators and tenders	519199 = Production workers, all other
516051 = Sewers, hand	531011 = Aircraft cargo handling supervisors
516052 = Tailors, dressmakers, and custom sewers	531021 = First-line manager, helper/laborer, hand
516061 = Textile bleaching/etc. machine operator	531031 = First-line manager, vehicle operator
516062 = Textile cutting machine setter	532011 = Airline pilot, copilot, flight engineer
516063 = Textile knitting machine setter	532012 = Commercial pilots
516064 = Textile winding machine setter	532021 = Air traffic controllers
516091 = Extruding machine setter, glass fiber	532022 = Airfield operations specialists
516092 = Fabric and apparel patternmakers	533011 = Ambulance driver/attendant, except EMT
516093 = Upholsterers	533021 = Bus drivers, transit and intercity
516099 = Textile/apparel/furnishing worker, other	533022 = Bus drivers, school
517011 = Cabinetmakers and bench carpenters	533031 = Driver/sales workers
517021 = Furniture finishers	533032 = Truck drivers, heavy and tractor-trailer
517031 = Model makers, wood	533033 = Truck drivers, light or delivery service
517032 = Patternmakers, wood	533041 = Taxi drivers and chauffeurs
517041 = Sawing machine setter, wood	533099 = Motor vehicle operators, all other
517042 = Woodworking setter, except sawing	534011 = Locomotive engineers
517099 = Woodworkers, all other	534012 = Locomotive firers
518011 = Nuclear power reactor operators	534013 = Rail yard engineer/dinkey operator
518012 = Power distributors and dispatchers	534021 = Railroad brake/signal/switch operator
518013 = Power plant operators	534031 = Railroad conductors and yardmasters
518021 = Stationary engineer/boiler operator	534041 = Subway and streetcar operators
518031 = Water/liquid waste plant op	534099 = Rail transportation workers, all other
518091 = Chemical plant and system operators	535011 = Sailors and marine oilers
518092 = Gas plant operators	535021 = Captain/mate/pilot of water vessel
518093 = Petroleum system/refinery op, gauger	535022 = Motorboat operators
518099 = Plant and system operators, all other	535031 = Ship engineers
519011 = Chemical equipment operators and tenders	536011 = Bridge and lock tenders
519012 = Separating/filtering/etc. machine setter	536021 = Parking lot attendants
519021 = Crushing/grinding/etc. machine setter	536031 = Service station attendants
519022 = Grinding and polishing workers, hand	536041 = Traffic technicians
519023 = Mixing/blending machine setter	536051 = Transportation inspectors
519031 = Cutters and trimmers, hand	536099 = Transportation workers, all other
519032 = Cutting/slicing machine setter	

537011 = Conveyor operators and tenders
 537021 = Crane and tower operators
 537031 = Dredge operators
 537032 = Excavating machine/dragline operator
 537033 = Loading machine, underground mining
 537041 = Hoist and winch operators
 537051 = Industrial truck and tractor operators
 537061 = Cleaners of vehicles and equipment
 537062 = Laborer/mover, hand
 537063 = Machine feeders and offbearers
 537064 = Packers and packagers, hand
 537071 = Gas pumping station operator
 537072 = Pump operators, except wellhead pumpers
 537073 = Wellhead pumpers
 537081 = Refuse and recyclable material collector
 537111 = Shuttle car operators
 537121 = Tank car, truck, and ship loaders
 537199 = Material moving workers, all other
 551011 = Air crew officers
 551012 = Aircraft launch and recovery officers
 551013 = Armored assault vehicle officers
 551014 = Artillery and missile officers
 551015 = Command and control center officers
 551016 = Infantry officers
 551017 = Special forces officers
 551019 = Military officer special/tactical ops
 552011 = First-line manager, air crew
 552012 = First-line manager, weapons specialists
 552013 = First-line manager, other tactical ops
 553011 = Air crew members
 553012 = Aircraft launch and recovery specialists
 553013 = Armored assault vehicle crew members
 553014 = Artillery and missile crew members
 553015 = Command and control center specialists
 553016 = Infantry
 553017 = Radar and sonar technicians
 553018 = Special forces
 553019 = Enlisted tactical ops, air/weapon crew

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDJBTL

Job title

[If COMPMODE = 0 and RDNUMJOB > 1]

Since you have more than one job, please refer to the job at which you work the most hours when answering the next few questions.(If you are a K-12 teacher, tell us about that job.)What is your job title and what do you do in your job? Please enter your job title and duties in the textboxes below and click on the "Search for Occupation" button.

[else if COMPMODE = 0 and RDNUMJOB <= 1]

What is your job title and what do you do in your job?

Please enter your job title and duties in the textboxes below and click on the "Search for Occupation" button.
 [else if COMPMODE = 1 and RDNUMJOB > 1]

Since you have more than one job, please refer to the job at which you work the most hours when answering the next few questions. What is your job title and what do you do in your job? Please bear with me while I code this.

[else]

What is your job title and what do you do in your job?

Please bear with me while I code this.

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDJBDY

Job duties

[If COMPMODE = 0 and RDNUMJOB > 1]

Since you have more than one job, please refer to the job at which you work the most hours when answering the next few questions.(If you are a K-12 teacher, tell us about that job.)What is your job title and what do you do in your job? Please enter your job title and duties in the textboxes below and click on the "Search for Occupation" button.

[else if COMPMODE = 0 and RDNUMJOB <= 1]

What is your job title and what do you do in your job?

Please enter your job title and duties in the textboxes below and click on the "Search for Occupation" button.

[else if COMPMODE = 1 and RDNUMJOB > 1]

Since you have more than one job, please refer to the job at which you work the most hours when answering the next few questions. What is your job title and what do you do in your job? Please bear with me while I code this.

[else]

What is your job title and what do you do in your job?

Please bear with me while I code this.

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDEMPZIP

Employer zip code

What is the 5-digit zip code where you work?

Values less than 00501 or greater than 99950 were replaced with a -6 to indicate the value was out of range.

Applies to: Respondents who were currently working for pay within the United States.

Instrument code: RDJSTAT = 1 and RDOUTUS ne 1
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDOUTUS

Employer zip code: did not work in U.S.

What is the 5-digit zip code where you work?

Do not work in the U.S.

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDEMPYTP

Type of employer

Job Title: [RDJBTL]In your job, do you work for...

1 = The school where you are currently enrolled

2 = A for-profit company

3 = A nonprofit organization

4 = A local, state, or federal government

5 = The military (including civilian employees of the military)

6 = Self-employed

7 = Other

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDIND

Industry: string

Job title: [RDJBTL]

[If COMPMODE = 0]

Please type in your [if RDEMPYTP ne 6} employer's] primary business or industry in the textbox and then, from the list below, select the category which best describes that business or industry. Examples of each industry will be displayed in the box as you make a selection.

[else]

Please provide your [if RDEMPYTP ne 6} employer's] primary business or industry. Please bear with me while I code this. (From the list below, please select the category which best describes the respondent's [if RDEMPYTP ne 6} employer's] industry or business area. As you click on a selection, examples of the industry will be displayed in the box.)

Industry text strings containing an employer name or address were set to a -9.

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Recode note: 1) If RDEMPYTP = 5 then RDIND = MILITARY

2) If RDEMPYTP = 4 then RDIND = GOVERNMENT

3) If RDOCC6 in (252012 252021 252022 252023 252031 252032 252041 252042 252043) then RDIND = EDUCATION

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDINDCD

Industry: coder

Job title: [RDJBTL]

[If COMPMODE = 0]

Please type in your [if RDEMPYYP ne 6} employer's] primary business or industry in the textbox and then, from the list below, select the category which best describes that business or industry. Examples of each industry will be displayed in the box as you make a selection.

[else]

Please provide your [if RDEMPYYP ne 6} employer's] primary business or industry. Please bear with me while I code this. (From the list below, please select the category which best describes the respondent's [if RDEMPYYP ne 6} employer's] industry or business area. As you click on a selection, examples of the industry will be displayed in the box.)

- 0 = None listed
- 11 = Agriculture, forestry, fishing, hunting
- 21 = Mining
- 22 = Utilities
- 23 = Construction
- 31 = Manufacturing
- 42 = Wholesale trade
- 44 = Retail/retail trade
- 48 = Transportation and warehousing
- 51 = Info/communication/data processing
- 52 = Finance and insurance
- 53 = Real estate and rental and leasing
- 54 = Professional/sci/technical services
- 55 = Management of companies and enterprises
- 61 = Education/education services
- 62 = Health care and social assistance
- 71 = Arts, entertainment, and recreation
- 72 = Hotels/motels/accommodations/food svcs
- 81 = All other services
- 92 = Public administration
- 561 = Administrative and support services
- 562 = Waste mangmnt/environmental remediation
- 811 = Personal care services
- 812 = Automotive repair and maintenance

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Recode note: 1) If RDEMPYYP = 5 then RDINDCD = 92

2) If RDEMPYYP = 4 then RDINDCD = 92

3) If RDOCC6 in (252012 252021 252022 252023 252031 252032 252041 252042 252043) then RDINDCD = 61

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDEMPMY

Date began job

Job title: [RDJBTL]

[If RDEMPYYP = 6]

In what month and year did you begin your current self-employment?

[else]

In what month and year did you start your current job? RDEMPMY is provided in the YYYYMM format. Dates after respondent's COMPDATE were replaced with a -6 to indicate the date was out of range.

Applies to: Respondents who were currently working for pay and not a K-12 teacher.

Instrument code: RDJSTAT = 1 and RDOCC6 not in (252012 252021 252022 252023 252031 252032 252041 252042 252043)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDEMPRT

Employed full-time or part-time

Job title: [RDJBTL]

Do you work full time or part time?

1 = Full-time

2 = Part-time

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDCURHRS

Hours worked weekly

Job title: [RDJBTL]

On average, how many hours do you work per week in your job?

Values equal to 0 or greater than 80 were replaced with a -6 to indicate the value was out of range.

Applies to: Respondents who were currently working for pay and were not primarily a student working to meet expenses.

Instrument code: RDJSTAT = 1 and RDWRKS ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDPREFT

Prefer to work more hours

Job title: [RDJBTL]

[If TCURFT = 1]

Would you prefer to work more hours than you do even though you are currently a full-time student?

[else if TCURENR = 1]

Would you prefer to work more hours than you do even though you are currently enrolled in school?

[else]

Would you prefer to work more hours than you do?

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDERNAMT

Amount earned from job

Job title: [RDJBTL]

How much do you earn from your job?

Values greater than 250,000 or less than 100 when

RDEARNT = 1, greater than 20,833.33 when

RDEARNT = 2, greater than 9,615.38 when RDEARNT

= 3, greater than 4,807.69 when RDEARNT = 4, greater

than 961.54 when RDEARNT = 5, or greater than

120.19 when RDEARNT = 6, were replaced with a -6 to

indicate the value was out of range. Each calculation was

based on the respondent reporting more than \$250,000

per year. Values equal to 0 for all RDEARNT were also

replaced with a -6 to indicate the value was out of range.

In the full student interview, respondents who indicated

current employment in certain teaching fields received

teaching-specific income questions and did not receive

this question. The abbreviated interview did not include

teaching-specific income questions, so teachers who

completed an abbreviated interview received

RDERNAMT.

Applies to: Respondents who participated in a completed full interview or a partial interview, were currently working for pay, and not a K-12 teacher, or who participated in an abbreviated interview and were currently working for pay.

Instrument code: (SUMSTFLG in (1 2) and RDJSTAT = 1 and RDOCC6 not in (252012 252021 252022 252023 252031 252032 252041 252042 252043)) or (SUMSTFLG in (3 4) and RDJSTAT = 1)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDEARNT

Time frame for earnings

Job title: [RDJBTL]

How much do you earn from your job?

In the full student interview, respondents who indicated

current employment in certain teaching fields received

teaching-specific income questions and did not receive

this question. The abbreviated interview did not include

teaching-specific income questions, so teachers who

completed an abbreviated interview received

RDEARNT.

1 = Per year

2 = Per month

3 = Every two weeks

4 = Per week

5 = Per day

6 = Per hour

Applies to: Respondents who participated in a completed full interview or a partial interview, were currently working for pay, and not a K-12 teacher, or who participated in an abbreviated interview and were currently working for pay.

Instrument code: (SUMSTFLG in (1 2) and RDJSTAT = 1 and RDOCC6 not in (252012 252021 252022 252023 252031 252032 252041 252042 252043)) or (SUMSTFLG in (3 4) and RDJSTAT = 1)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDEMPMI

Employer offers benefits: medical or health insurance

Job title: [RDJBTL]

Which of the following benefits does your current employer offer you?

Medical insurance and/or other health insurance, such as dental or optical

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay and not self-employed.

Instrument code: RDJSTAT = 1 and RDEMPMITYP ne 6

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDEMPLI

Employer offers benefits: life insurance

Job title: [RDJBTL]

Which of the following benefits does your current employer offer you?

Life insurance

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay and not self-employed.

Instrument code: RDJSTAT = 1 and RDEMPYTP ne 6
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDEMPRB

Employer offers benefits: retirement or other financial benefits

Job title: [RDJBTL]

Which of the following benefits does your current employer offer you?

Retirement or other financial benefits, such as a 401(k)/403(b)

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay and not self-employed.

Instrument code: RDJSTAT = 1 and RDEMPYTP ne 6
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDEMPOTH

Employer offers benefits: other

Job title: [RDJBTL]

Which of the following benefits does your current employer offer you?

Other (for example, on-site facilities for childcare or fitness, subsidies for transit or food services, etc.)

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay and not self-employed.

Instrument code: RDJSTAT = 1 and RDEMPYTP ne 6
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDNSF19B

Job related to major

Job title: [RDJBTL]

Would you say your job is closely related, somewhat related, or not related to your bachelor's degree from [NPSAS]?

RDNSF19B is based on item B19 from the NSF 2008 RCG paper-based questionnaire. B19 asks "To what extent was your work on your principal job related to your highest degree? Was it? 1) Closely related; 2) Somewhat related; or 3) Not related."

For more information, see

<http://www.nsf.gov/statistics/srvyrecentgrads/>.

0 = Not related

1 = Closely related

2 = Somewhat related

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDNSFPAY

Reason working outside bachelor's field: pay/promotion opportunities

Which of the following factors influenced your decision to work in an area outside of your [NPSAS] bachelor's degree field...

Pay, promotion opportunities?

RDNSFPAY is based on item B20 from the NSF 2008 RCG paper-based questionnaire. B20 asks "Did these factors influence your decision to work in an area outside the field of your highest degree? 1) Pay, promotion opportunities; 2) Working conditions (e.g., hours, equipment, working environment); 3) Job location; 4) Change in career or professional interests; 5) Family-related reasons (e.g., children, spouse's job moved); 6) Job in highest degree field not available; or 7) Some other reason, specify."

For more information, see

<http://www.nsf.gov/statistics/srvyrecentgrads/>.

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay and whose job was not related to their bachelor's degree.

Instrument code: RDJSTAT = 1 and RDNSF19B = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDNSFCON

Reason working outside bachelor's field: working conditions

Which of the following factors influenced your decision to work in an area outside of your [NPSAS] bachelor's degree field...

Working conditions (for example, hours, equipment, working environment)?

RDNSFCON is based on item B20 from the NSF 2008 RCG paper-based questionnaire. B20 asks "Did these factors influence your decision to work in an area outside the field of your highest degree? 1) Pay, promotion opportunities; 2) Working conditions (e.g., hours, equipment, working environment); 3) Job location; 4) Change in career or professional interests; 5) Family-related reasons (e.g., children, spouse's job moved); 6) Job in highest degree field not available; or 7) Some other reason, specify."

For more information, see

<http://www.nsf.gov/statistics/srvyrecentgrads/>.

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay and whose job was not related to their bachelor's degree.

Instrument code: RDJSTAT = 1 and RDNSF19B = 0
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDNSFLOC

Reason working outside bachelor's field: job location

Which of the following factors influenced your decision to work in an area outside of your [NPSAS] bachelor's degree field...

Job location?

RDNSFLOC is based on item B20 from the NSF 2008 RCG paper-based questionnaire. B20 asks "Did these factors influence your decision to work in an area outside the field of your highest degree? 1) Pay, promotion opportunities; 2) Working conditions (e.g., hours, equipment, working environment); 3) Job location; 4) Change in career or professional interests; 5) Family-related reasons (e.g., children, spouse's job moved); 6) Job in highest degree field not available; or 7) Some other reason, specify."

For more information see,

<http://www.nsf.gov/statistics/srvyrecentgrads/>.

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay and whose job was not related to their bachelor's degree.

Instrument code: RDJSTAT = 1 and RDNSF19B = 0
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDNSFCHG

Reason working outside bachelor's field: career change

Which of the following factors influenced your decision to work in an area outside of your [NPSAS] bachelor's degree field...

Change in career or professional interests?

RDNSFCHG is based on item B20 from the NSF 2008 RCG paper-based questionnaire. B20 asks "Did these factors influence your decision to work in an area outside the field of your highest degree? 1) Pay, promotion opportunities; 2) Working conditions (e.g., hours, equipment, working environment); 3) Job location; 4) Change in career or professional interests; 5) Family-related reasons (e.g., children, spouse's job moved); 6) Job in highest degree field not available; or 7) Some other reason, specify."

For more information see,

<http://www.nsf.gov/statistics/srvyrecentgrads/>.

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay and whose job was not related to their bachelor's degree.

Instrument code: RDJSTAT = 1 and RDNSF19B = 0
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDNSFFAM

Reason working outside bachelor's field: family-related

Which of the following factors influenced your decision to work in an area outside of your [NPSAS] bachelor's degree field...

Family-related reasons (for example, children, spouse's job moved)?

RDNSFFAM is based on item B20 from the NSF 2008 RCG paper-based questionnaire. B20 asks "Did these factors influence your decision to work in an area outside the field of your highest degree? 1) Pay, promotion opportunities; 2) Working conditions (e.g., hours, equipment, working environment); 3) Job location; 4) Change in career or professional interests; 5) Family-related reasons (e.g., children, spouse's job moved); 6) Job in highest degree field not available; or 7) Some other reason, specify."

For more information see,

<http://www.nsf.gov/statistics/srvyrecentgrads/>.

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay and whose job was not related to their bachelor's degree.

Instrument code: RDJSTAT = 1 and RDNSF19B = 0
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDNSFFLD

Reason working outside bachelor's field: no job in degree field
Which of the following factors influenced your decision to work in an area outside of your [NPSAS] bachelor's degree field...

Job in [NPSAS] bachelor's degree field not available?
RDNSFFLD is based on item B20 from the NSF 2008 RCG paper-based questionnaire. B20 asks "Did these factors influence your decision to work in an area outside the field of your highest degree? 1) Pay, promotion opportunities; 2) Working conditions (e.g., hours, equipment, working environment); 3) Job location; 4) Change in career or professional interests; 5) Family-related reasons (e.g., children, spouse's job moved); 6) Job in highest degree field not available; or 7) Some other reason, specify."

For more information see,
<http://www.nsf.gov/statistics/srvyrecentgrads/>

- 0 = No
- 1 = Yes

Applies to: Respondents who were currently working for pay and whose job was not related to their bachelor's degree.

Instrument code: RDJSTAT = 1 and RDNSF19B = 0
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDNSFOFR

Reason working outside bachelor's field: other
Which of the following factors influenced your decision to work in an area outside of your [NPSAS] bachelor's degree field...

Other factor(s) not listed?
RDNSFOFR is based on item B20 from the NSF 2008 RCG paper-based questionnaire. B20 asks "Did these factors influence your decision to work in an area outside the field of your highest degree? 1) Pay, promotion opportunities; 2) Working conditions (e.g., hours, equipment, working environment); 3) Job location; 4) Change in career or professional interests; 5) Family-related reasons (e.g., children, spouse's job moved); 6) Job in highest degree field not available; or 7) Some other reason, specify."

For more information see,
<http://www.nsf.gov/statistics/srvyrecentgrads/>

- 0 = No
- 1 = Yes

Applies to: Respondents who were currently working for pay and whose job was not related to their bachelor's degree.

Instrument code: RDJSTAT = 1 and RDNSF19B = 0
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDNSF21B

Most important reason for working outside bachelor's field
Which of the following was your most important reason for working in an area outside of your bachelor's degree field...

RDNSF21B is based on item B21 from the NSF 2008 RCG paper-based questionnaire. B21 asks "Which two factors in question B20 were your most important reasons for working in an area outside the field of your highest degree? 1) Most important reason, and 2) Second most important reason."

For more information, see
<http://www.nsf.gov/statistics/srvyrecentgrads/>

- 1 = Pay, promotion opportunities
- 2 = Working conditions
- 3 = Job location
- 4 = Change in career or professional interests
- 5 = Family-related reasons
- 6 = Job in [NPSAS] bachelor's degree field not available
- 7 = Other factor(s) not listed

Applies to: Respondents who were currently working for pay, whose job was not related to their bachelor's degree, and who selected two or more reasons why they worked in an area outside their bachelor's degree.

Instrument code: RDJSTAT = 1 and RDNSF19B = 0
and [selected two or more reasons why they worked in an area outside their bachelor's degree from the following variables: RDNSFPAY, RDNSFCON, RDNSFLOC, RDNSFCHG, RDNSFFAM, RDNSFFLD, and RDNSFOFR]
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDNF21B2

Second most important reason for working outside bachelor's field
Which of the following was your second most important reason for working in an area outside of your [NPSAS] bachelor's degree field...

- 1 = Pay, promotion opportunities
- 2 = Working conditions
- 3 = Job location
- 4 = Change in career or professional interests
- 5 = Family-related reasons
- 6 = Job in [NPSAS] bachelor's degree field not available
- 7 = Other factor(s) not listed

Applies to: Respondents who were currently working for pay, whose job was not related to their bachelor's degree, and who selected three or more reasons why they worked in an area outside their bachelor's degree.

Instrument code: RDJSTAT = 1 and RDNSF19B = 0
and [selected at least three reasons why they worked in an area outside their bachelor's degree from the following variables: RDNSFPAY, RDNSFCON, RDNSFLOC,

RDNSFCHG, RDNSFFAM, RDNSFFLD, and RDNSFOFR]
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.
Source: B&B:08/09 full scale student interview

RDCARIND

Job part of a career in industry
Job title: [RDJBTL]
Do you consider your job to be part of a career you are pursuing in your occupation or industry?
0 = No
1 = Yes

Applies to: Respondents who were currently working for pay and whose job was related to their bachelor's degree.
Instrument code: RDJSTAT = 1 and RDNSF19B ne 0
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.
Source: B&B:08/09 full scale student interview

RDCURCAR

Job description: exploring career options
Job title: [RDJBTL]
Since this job is not the start of your career, how would you describe it?
Exploring career options
0 = No
1 = Yes

Applies to: Respondents who were currently working for pay and did not consider their job to be the beginning of a career.
Instrument code: RDJSTAT = 1 and RDCARIND = 0
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.
Source: B&B:08/09 full scale student interview

RDCUREST

Job description: continuing in job held before [NPSAS] graduation
Job title: [RDJBTL]
Since this job is not the start of your career, how would you describe it?
Continuing in job held before left [NPSAS]
0 = No
1 = Yes

Applies to: Respondents who were currently working for pay and did not consider their job to be the beginning of a career.
Instrument code: RDJSTAT = 1 and RDCARIND = 0
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.
Source: B&B:08/09 full scale student interview

RDCURPAY

Job description: just paying the bills
Job title: [RDJBTL]
Since this job is not the start of your career, how would you describe it?
Just paying the bills (or only job available)
0 = No
1 = Yes

Applies to: Respondents who were currently working for pay and did not consider their job to be the beginning of a career.
Instrument code: RDJSTAT = 1 and RDCARIND = 0
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.
Source: B&B:08/09 full scale student interview

RDCUREDU

Job description: working to prepare for further education
Job title: [RDJBTL]
Since this job is not the start of your career, how would you describe it?
Working to prepare for further education
0 = No
1 = Yes

Applies to: Respondents who were currently working for pay and did not consider their job to be the beginning of a career.
Instrument code: RDJSTAT = 1 and RDCARIND = 0
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.
Source: B&B:08/09 full scale student interview

RDCURSCH

Job description: job while in school
Job title: [RDJBTL]
Since this job is not the start of your career, how would you describe it?
Job while in school
0 = No
1 = Yes

Applies to: Respondents who were currently working for pay, currently enrolled in a degree or certificate program, and did not consider their job to be the beginning of a career.
Instrument code: RDJSTAT = 1 and RDCARIND = 0 and TCURENR = 1
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.
Source: B&B:08/09 full scale student interview

RDCURINT

Job description: job while pursuing other interests

Job title: [RDJBTL]

Since this job is not the start of your career, how would you describe it?

Job while pursuing other interests

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay and did not consider their job to be the beginning of a career.

Instrument code: RDJSTAT = 1 and RDCARIND = 0
 Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDCURFUT

Job description: deciding on future education/ career

Job title: [RDJBTL]

Since this job is not the start of your career, how would you describe it?

Working while deciding on future education/ career

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay and did not consider their job to be the beginning of a career.

Instrument code: RDJSTAT = 1 and RDCARIND = 0
 Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDCUROTH

Job description: other

Job title: [RDJBTL]

Since this job is not the start of your career, how would you describe it?

Other

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay and did not consider their job to be the beginning of a career.

Instrument code: RDJSTAT = 1 and RDCARIND = 0
 Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDDIFNUM

Time before current job offer: amount

Job title: [RDJBTL]

After you began applying for jobs, about how long did it take before you received an offer for your current job?

Values greater than 1,460 when RDDIFTIM = 1, greater than 208 when RDDIFTIM = 2, greater than 48 when RFVLAMT = 3, or greater than 4 when RDDIFTIM = 1, were replaced with a -6 to indicate the value was out of

range. Each calculation was based on the respondent reporting more than 4 years.

Applies to: Respondents who were currently working for pay, whose job was related to their bachelor's degree, and who considered their job to be the beginning of a career.

Instrument code: RDJSTAT = 1 and RDNSF19B ne 0 and RDCARIND ne 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDDIFTIM

Time before current job offer: time frame

Job title: [RDJBTL]

After you began applying for jobs, about how long did it take before you received an offer for your current job?

1 = Day(s)

2 = Week(s)

3 = Month(s)

4 = Year(s)

Applies to: Respondents who were currently working for pay, whose job was related to their bachelor's degree, and who considered their job to be the beginning of a career.

Instrument code: RDJSTAT = 1 and RDNSF19B ne 0 and RDCARIND ne 0 and RDDIFNUM ne 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDJBPAY

Compensation satisfaction

Job title: [RDJBTL]

Are you satisfied with each of the following in your current job...

Compensation (pay and fringe benefits)?

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDJBIMPO

Challenge satisfaction

Job title: [RDJBTL]

Are you satisfied with each of the following in your current job...

Importance and challenge of your work?

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDJBSECR

Job security satisfaction

Job title: [RDJBTL]

Are you satisfied with each of the following in your current job...

Job security?

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDJBOVER

Overall satisfaction

Job title: [RDJBTL]

Are you satisfied with each of the following in your current job...

Overall, would you say you are satisfied with your job?

0 = No

1 = Yes

Applies to: Respondents who were currently working for pay.

Instrument code: RDJSTAT = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDSEARCH

Looking for a job

[If RDJSTAT = 1]

Are you currently looking for a different job?

[else]

Are you looking for a job?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD07JLLK

Looking for work July 2007

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

July 2007

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before July 2007 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200707 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD07AGLK

Looking for work August 2007

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

August 2007

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before August 2007 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200708 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD07SPLK

Looking for work September 2007

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

September 2007

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before September 2007 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200709 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD07OCLK

Looking for work October 2007

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

October 2007

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before October 2007 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200710 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD07NVLK

Looking for work November 2007

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

November 2007

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before November 2007 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200711 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD07DCLK

Looking for work December 2007

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

December 2007

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before December 2007 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200712 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08JALK

Looking for work January 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

January 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before January 2008 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200801 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08FBLK

Looking for work February 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

February 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before February 2008 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200802 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08MRLK

Looking for work March 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

March 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before March 2008 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200803 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08APLK

Looking for work April 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

April 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before April 2008 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200804 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08MYLK

Looking for work May 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

May 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before May 2008 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200805 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08JNLK

Looking for work June 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

June 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before June 2008 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200806 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08JLLK

Looking for work July 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

July 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before July 2008 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200807 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08AGLK

Looking for work August 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

August 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before August 2008 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200808 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08SPLK

Looking for work September 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

September 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before September 2008 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200809 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08OCLK

Looking for work October 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

October 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before October 2008 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200810 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08NVLK

Looking for work November 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

November 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before November 2008 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200811 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08DCLK

Looking for work December 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

December 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before December 2008 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200812 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09JALK

Looking for work January 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

January 2009

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before January 2009 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200901 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09FBLK

Looking for work February 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

February 2009

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before February 2009 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200902 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09MRLK

Looking for work March 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

March 2009

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before March 2009 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200903 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09APLK

Looking for work April 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

April 2009

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before April 2009 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200904 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09MYLK

Looking for work May 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

May 2009

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before May 2009 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200905 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09JNLK

Looking for work June 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

June 2009

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before June 2009 and had looked for work since graduation.

Instrument code: RAAWRDMY <= 200906 and RDLKNEV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09JLLK

Looking for work July 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

July 2009

0 = No

1 = Yes

Applies to: Respondents who had looked for work since graduation and completed the interview after July 2009.

Instrument code: RDLKNEV ne 1 and COMPDATE > 20090731

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09AGLK

Looking for work August 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

August 2009

0 = No

1 = Yes

Applies to: Respondents who had looked for work since graduation and completed the interview after August 2009.

Instrument code: RDLKNEV ne 1 and COMPDATE > 20090831

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09SPLK

Looking for work September 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

September 2009

0 = No

1 = Yes

Applies to: Respondents who had looked for work since graduation and completed the interview after September 2009.

Instrument code: RDLKNEV ne 1 and COMPDATE > 20090930

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09OCLK

Looking for work October 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

October 2009

0 = No

1 = Yes

Applies to: Respondents who had looked for work since graduation and completed the interview after October 2009.

Instrument code: RDLKNEV ne 1 and COMPDATE > 20091031

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09NVLK

Looking for work November 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

November 2009

0 = No

1 = Yes

Applies to: Respondents who had looked for work since graduation and completed the interview after November 2009.

Instrument code: RDLKNEV ne 1 and COMPDATE > 20091130

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09DCLK

Looking for work December 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

December 2009

0 = No

1 = Yes

Applies to: Respondents who had looked for work since graduation and completed the interview after December 2009.

Instrument code: RDLKNEV ne 1 and COMPDATE > 20091231

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD10JALK

Looking for work January 2010

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

January 2010

0 = No

1 = Yes

Applies to: Respondents who had looked for work since graduation and completed the interview after January 2010.

Instrument code: RDLKNEV ne 1 and COMPDATE > 20100131

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD10FBLK

Looking for work February 2010

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

February 2010

0 = No

1 = Yes

Applies to: Respondents who had looked for work since graduation and completed the interview after February 2010.

Instrument code: RDLKNEV ne 1 and COMPDATE > 20100228

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDLKNEV

Have not looked for work

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you were looking for work. (Also check the box for any month in which you were employed but were looking for a different or additional job.)

Not applicable (have not looked for work since graduation and/or found job before graduation)

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDWRK12M

Employed since graduating with bachelor's degree

Have you been employed at any time since graduating with your bachelor's degree from [NPSAS] in [RAAWRDMY]?

0 = No

1 = Yes

Applies to: All respondents.

Recode note: If RDJSTAT = 1 then RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD07JLWK

Employed July 2007

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

July 2007

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before July 2007 and worked since graduation.

Instrument code: RAAWRDMY <= 200707 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD07AGWK

Employed August 2007

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

August 2007

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before August 2007 and worked since graduation.

Instrument code: RAAWRDMY <= 200708 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD07SPWK

Employed September 2007

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

September 2007

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before September 2007 and worked since graduation.

Instrument code: RAAWRDMY <= 200709 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD07OCWK

Employed October 2007

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

October 2007

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before October 2007 and worked since graduation.

Instrument code: RAAWRDMY <= 200710 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD07NVWK

Employed November 2007

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

November 2007

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before November 2007 and worked since graduation.

Instrument code: RAAWRDMY <= 200711 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD07DCWK

Employed December 2007

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

December 2007

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before December 2007 and worked since graduation.

Instrument code: RAAWRDMY <= 200712 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08JAWK

Employed January 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

January 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before January 2008 and worked since graduation.

Instrument code: RAAWRDMY <= 200801 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08FBWK

Employed February 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

February 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before February 2008 and worked since graduation.

Instrument code: RAAWRDMY <= 200802 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08MRWK

Employed March 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

March 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before March 2008 and worked since graduation.

Instrument code: RAAWRDMY <= 200803 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08APWK

Employed April 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

April 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before April 2008 and worked since graduation.

Instrument code: RAAWRDMY <= 200804 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08MYWK

Employed May 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

May 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before May 2008 and worked since graduation.

Instrument code: RAAWRDMY <= 200805 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08JNWK

Employed June 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

June 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before June 2008 and worked since graduation.

Instrument code: RAAWRDMY <= 200806 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08JLWK

Employed July 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

July 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before July 2008 and worked since graduation.

Instrument code: RAAWRDMY <= 200807 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08AGWK

Employed August 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

August 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before August 2008 and worked since graduation.

Instrument code: RAAWRDMY <= 200808 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08SPWK

Employed September 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

September 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before September 2008 and worked since graduation.

Instrument code: RAAWRDMY <= 200809 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08OCWK

Employed October 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

October 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before October 2008 and worked since graduation.

Instrument code: RAAWRDMY <= 200810 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08NVWK

Employed November 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

November 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before November 2008 and worked since graduation.

Instrument code: RAAWRDMY <= 200811 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD08DCWK

Employed December 2008

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

December 2008

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before December 2008 and worked since graduation.

Instrument code: RAAWRDMY <= 200812 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09JAWK

Employed January 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

January 2009

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before January 2009 and worked since graduation.

Instrument code: RAAWRDMY <= 200901 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09FBWK

Employed February 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

February 2009

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before February 2009 and worked since graduation.

Instrument code: RAAWRDMY <= 200902 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09MRWK

Employed March 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

March 2009

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before March 2009 and worked since graduation.

Instrument code: RAAWRDMY <= 200903 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09APWK

Employed April 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

April 2009

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before April 2009 and worked since graduation.

Instrument code: RAAWRDMY <= 200904 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09MYWK

Employed May 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

May 2009

0 = No

1 = Yes

Applies to: Respondents who were awarded their bachelor's degree in or before May 2009 and worked since graduation.

Instrument code: RAAWRDMY <= 200905 and RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09JNWK

Employed June 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

June 2009

0 = No

1 = Yes

Applies to: Respondents who worked since graduation. Instrument code: RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09JLWK

Employed July 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

July 2009

0 = No

1 = Yes

Applies to: Respondents who worked since graduation and completed the interview after July 2009.

Instrument code: RDWRK12M = 1 and COMPDATE > 20090731

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09AGWK

Employed August 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

August 2009

0 = No

1 = Yes

Applies to: Respondents who worked since graduation and completed the interview after August 2009.

Instrument code: RDWRK12M = 1 and COMPDATE > 20090831

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09SPWK

Employed September 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

September 2009

0 = No

1 = Yes

Applies to: Respondents who worked since graduation and completed the interview after September 2009.

Instrument code: RDWRK12M = 1 and COMPDATE > 20090930

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09OCWK

Employed October 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

October 2009

0 = No

1 = Yes

Applies to: Respondents who worked since graduation and completed the interview after October 2009.

Instrument code: RDWRK12M = 1 and COMPDATE > 20091031

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09NVWK

Employed November 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

November 2009

0 = No

1 = Yes

Applies to: Respondents who worked since graduation and completed the interview after November 2009.

Instrument code: RDWRK12M = 1 and COMPDATE > 20091130

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD09DCWK

Employed December 2009

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

December 2009

0 = No

1 = Yes

Applies to: Respondents who worked since graduation and completed the interview after December 2009.

Instrument code: RDWRK12M = 1 and COMPDATE > 20091231

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD10JAWK

Employed January 2010

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

January 2010

0 = No

1 = Yes

Applies to: Respondents who worked since graduation and completed the interview after January 2010.

Instrument code: RDWRK12M = 1 and COMPDATE > 20100131

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RD10FBWK

Employed February 2010

Since your graduation in [RAAWRDMY] from [NPSAS], please indicate which months you worked:

February 2010

0 = No

1 = Yes

Applies to: Respondents who worked since graduation and completed the interview after February 2010.

Instrument code: RDWRK12M = 1 and COMPDATE > 20100228

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RDNMJBGD

Number of jobs since graduation

How many jobs have you had since you graduated from [NPSAS]?

Values equal to 0 or greater than 9 were replaced with a -6 to indicate the value was out of range.

1 = 1

2 = 2

3 = 3

4 = 4

5 = 5

6 = 6

7 = 7

8 = 8

9 = 9

Applies to: Respondents who worked since graduation.

Instrument code: RDWRK12M = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

Section E: Teaching

REEVRTCH

Taught grades K-12 since graduating from NPSAS

Since graduating from [NPSAS], have you worked as a teacher at the K-12 level? (Indicate "Yes" if you have held a teaching position, including any type of substitute teacher, teacher's aide, student teaching, itinerant, or regular classroom teaching position at the K-12 level.)

0 = No

1 = Yes

Applies to: All respondents.

Recode note: 1) If RDWRK12M = 0 then REEVRTCH = 0 2) If RDOCC6 in (252012 252021 252022 252023 252031 252032 252041 252042 252043) then REEVRTCH = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REPREPAR

Prepared for a teaching career at the K-12 level

Have you done anything to prepare for a teaching career at the K-12 level?

0 = No

1 = Yes

Applies to: Respondents who had not taught since receiving their bachelor's degree.

Instrument code: REEVRTCH ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECONSID

Currently considering career in teaching at the K-12 level

Are you currently considering a career in teaching at the K-12 level?

0 = No

1 = Yes

Applies to: Respondents who had not taught since receiving their bachelor's degree and were not preparing to teach.

Instrument code: REEVRTCH ne 1 and REPREPAR ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

TTEACHR

Teaching status

TTEACHR is an internal variable that indicates teaching status.

If RDOCC6 in (252012 252021 252022 252023 252031 252032 252041 252042 252043) then TTEACHR = 1; else if REEVRTCH = 1 then TTEACHR = 2; else if REPREPAR = 1 then TTEACHR = 3; else if RECONSID = 1 then TTEACHR = 4; else if RECONSID = -9 then TTEACHR = -9; else TTEACHR = 0

0 = Never taught

1 = Current teacher

2 = Had taught since NPSAS

3 = Preparing for teaching

4 = Currently considering teaching

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RETCHAPP

Applied for K-12 teaching position since bachelor's degree completion

Have you applied for a K-12 teaching position since completing your bachelor's degree at [NPSAS]?

0 = No

1 = Yes

Applies to: Respondents who had prepared to teach or were currently considering teaching.

Instrument code: TTEACHR in (3 4)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REPREF

Reason didn't apply for a teaching position: preferred other career

What are the reasons you did not apply for a teaching position?

Preferred a different career

0 = No

1 = Yes

Applies to: Respondents who had prepared to teach or were currently considering teaching and had not applied for a teaching position since completing their bachelor's degree at the NPSAS school.

Instrument code: TTEACHR in (3 4) and RETCHAPP ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RETCHNO

Reason didn't apply for a teaching position: did not like teaching
What are the reasons you did not apply for a teaching position?

Decided you did not like teaching

0 = No

1 = Yes

Applies to: Respondents who had prepared to teach or were currently considering teaching and had not applied for a teaching position since completing their bachelor's degree at the NPSAS school.

Instrument code: TTEACHR in (3 4) and RETCHAPP ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REAPCOMP

Reason didn't apply for a teaching position: application difficult
What are the reasons you did not apply for a teaching position?

Application process too difficult

0 = No

1 = Yes

Applies to: Respondents who had prepared to teach or were currently considering teaching and had not applied for a teaching position since completing their bachelor's degree at the NPSAS school.

Instrument code: TTEACHR in (3 4) and RETCHAPP ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REMORED

Reason didn't apply for a teaching position: needed more education
What are the reasons you did not apply for a teaching position?

Needed more education or certification to teach

0 = No

1 = Yes

Applies to: Respondents who had prepared to teach or were currently considering teaching and had not applied for a teaching position since completing their bachelor's degree at the NPSAS school.

Instrument code: TTEACHR in (3 4) and RETCHAPP ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REFAM

Reason didn't apply for a teaching position: personal reasons
What are the reasons you did not apply for a teaching position?

Personal reasons or family obligations

0 = No

1 = Yes

Applies to: Respondents who had prepared to teach or were currently considering teaching and had not applied for a teaching position since completing their bachelor's degree at the NPSAS school.

Instrument code: TTEACHR in (3 4) and RETCHAPP ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REMORMON

Reason didn't apply for a teaching position: didn't offer enough money
What are the reasons you did not apply for a teaching position?

Teaching did not offer enough money

0 = No

1 = Yes

Applies to: Respondents who had prepared to teach or were currently considering teaching and had not applied for a teaching position since completing their bachelor's degree at the NPSAS school.

Instrument code: TTEACHR in (3 4) and RETCHAPP ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REOTHRSN

Reason didn't apply for a teaching position: another reason not listed
What are the reasons you did not apply for a teaching position?

Another reason not listed

0 = No

1 = Yes

Applies to: Respondents who had prepared to teach or were currently considering teaching and had not applied for a teaching position since completing their bachelor's degree at the NPSAS school.

Instrument code: TTEACHR in (3 4) and RETCHAPP ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REOFFER

Received any offers for teaching positions

Have you received any offers for teaching positions?

0 = No

1 = Yes

Applies to: Respondents who had prepared to teach or were currently considering teaching and had applied for a teaching position since completing their bachelor's degree at the NPSAS school.

Instrument code: TTEACHR in (3 4) and RETCHAPP = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECURCRT

Certified to teach at the K-12 level

Other than an emergency certificate or waiver, are you currently certified to teach at the K-12 level?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers, had taught since completing their bachelor's degree, or had prepared to teach.

Instrument code: TTEACHR in (1 2 3)

Recode note: If RECRITYP = 6 then RECURCRT = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECRITYP

Type of teacher certification

What type of teacher certificate do you hold?

1 = Regular/standard state certificate or advanced professional certificate

2 = Certificate issued after satisfying all requirements except a probationary period

3 = Certificate that requires additional courses, student teaching, or passing a test before obtaining regular certification

4 = Certificate issued to persons who must complete a certification program in order to continue teaching

5 = Other type of teacher certification

6 = None (no teacher certification)

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECRITYM

Date first certified to teach

In what month and year were you first certified to teach?

RECRITYM is provided in the YYYYMM format.

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRITYM ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECGENA

Content area certification: elementary education

In what content area(s) are you currently certified to teach?

Elementary education (general curriculum in elementary or middle grades)

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRITYM ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECGENB

Content area certification: secondary education

In what content area(s) are you currently certified to teach?

Secondary education (general curriculum in middle or secondary grades)

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRITYM ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECSPCED

Content area certification: special education

In what content area(s) are you currently certified to teach?

Special education

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRTTYP ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECART

Content area certification: arts and music

In what content area(s) are you currently certified to teach?

Arts and music

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRTTYP ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECENGL

Content area certification: English or language arts

In what content area(s) are you currently certified to teach?

English or language arts

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRTTYP ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECESL

Content area certification: English as a second language

In what content area(s) are you currently certified to teach?

English as a second language (ESL)

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRTTYP ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECFLNG

Content area certification: foreign languages

In what content area(s) are you currently certified to teach?

Foreign languages

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRTTYP ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REHELTH

Content area certification: health/ physical education

In what content area(s) are you currently certified to teach?

Health, physical education

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRTTYP ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECMATH

Content area certification: math or computer science

In what content area(s) are you currently certified to teach?

Mathematics or computer science

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRTTYP ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECSCIEN

Content area certification: natural sciences

In what content area(s) are you currently certified to teach?

Natural sciences

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRTTYP ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECSOSCI

Content area certification: social sciences

In what content area(s) are you currently certified to teach?

Social sciences

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRTTYP ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECVOCTC

Content area certification: vocational/ career/ technical education

In what content area(s) are you currently certified to teach?

Vocational, career, or technical education

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRTTYP ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REMISC

Content area certification: miscellaneous

In what content area(s) are you currently certified to teach?

Miscellaneous (driver education, humanities or liberal studies, library or information science, military science or ROTC, philosophy, religious studies, theology, or divinity)

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRTTYP ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECOTHER

Content area certification: other

In what content area(s) are you currently certified to teach?

Other

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were currently certified to teach, and indicated the type of certification they held.

Instrument code: TTEACHR in (1 2 3) and RECURCRT = 1 and RECRTTYP ne -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECRTCRS

Taken or taking courses for teacher certification at the K-12 level
 Have you taken, or are you now taking, courses to prepare for teacher certification at the K-12 level?

- 0 = No
- 1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were not currently certified to teach or did not hold a regular teaching certificate, and did not major in the teaching field.

Instrument code: TTEACHR in (1 2 3) and (RECURCRT ne 1 or RECRTTYP ne 1) and RBNPMSPE not in (13.0101 13.0201 13.0202

13.0203 13.0299
 13.1001 13.1003 13.1004 13.1005 13.1006 13.1007
 13.1008 13.1009
 13.1011 13.1012 13.1013 13.1014 13.1015 13.1016
 13.1017 13.1018
 13.1019 13.1099 13.1202 13.1203 13.1205 13.1206
 13.1207 13.1208
 13.1209 13.1210 13.1299 13.1301 13.1302 13.1303
 13.1304 13.1305
 13.1306 13.1307 13.1308 13.1309 13.1310 13.1311
 13.1312 13.1314
 13.1315 13.1316 13.1317 13.1318 13.1319 13.1320
 13.1321 13.1322
 13.1323 13.1324 13.1325 13.1326 13.1327 13.1328
 13.1329 13.1330
 13.1331 13.1332 13.1333 13.1335 13.1337 13.1338
 13.1399 13.1401
 13.1402 13.1499) and RBNP2SPE not in (13.0101
 13.0201 13.0202 13.0203
 13.0299 13.1001 13.1003 13.1004 13.1005 13.1006
 13.1007 13.1008
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 13.1016 13.1017
 13.1018 13.1019 13.1099 13.1202 13.1203 13.1205
 13.1206 13.1207
 13.1208 13.1209 13.1210 13.1299 13.1301 13.1302
 13.1303 13.1304
 13.1305 13.1306 13.1307 13.1308 13.1309 13.1310
 13.1311 13.1312
 13.1314 13.1315 13.1316 13.1317 13.1318 13.1319
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 13.1322 13.1323 13.1324 13.1325 13.1326 13.1327
 13.1328 13.1329
 13.1330 13.1331 13.1332 13.1333 13.1335 13.1337
 13.1338 13.1399
 13.1401 13.1402 13.1499) and [no preloaded teaching
 major from NPSAS:08 FS]

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RESTCOMP

Completed or now completing student teaching or teacher practicum
 Have you completed, or are you now completing, a student teaching assignment or a teacher practicum?

- 0 = No
- 1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were not currently certified to teach or did not hold a regular teaching certificate, and did not major in the teaching field.

Instrument code: TTEACHR in (1 2 3) and (RECURCRT ne 1 or RECRTTYP ne 1) and RBNPMSPE not in (13.0101 13.0201 13.0202

13.0203 13.0299
 13.1001 13.1003 13.1004 13.1005 13.1006 13.1007
 13.1008 13.1009
 13.1011 13.1012 13.1013 13.1014 13.1015 13.1016
 13.1017 13.1018
 13.1019 13.1099 13.1202 13.1203 13.1205 13.1206
 13.1207 13.1208
 13.1209 13.1210 13.1299 13.1301 13.1302 13.1303
 13.1304 13.1305
 13.1306 13.1307 13.1308 13.1309 13.1310 13.1311
 13.1312 13.1314
 13.1315 13.1316 13.1317 13.1318 13.1319 13.1320
 13.1321 13.1322
 13.1323 13.1324 13.1325 13.1326 13.1327 13.1328
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 13.1016 13.1017
 13.1018 13.1019 13.1099 13.1202 13.1203 13.1205
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 13.1311 13.1312
 13.1314 13.1315 13.1316 13.1317 13.1318 13.1319
 13.1320 13.1321
 13.1322 13.1323 13.1324 13.1325 13.1326 13.1327
 13.1328 13.1329
 13.1330 13.1331 13.1332 13.1333 13.1335 13.1337
 13.1338 13.1399
 13.1401 13.1402 13.1499) and [no preloaded teaching
 major from NPSAS:08 FS]

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REJBTP01

Type of K-12 teaching position 1

What type of K-12 teaching position did you have when you first started working as a teacher after graduating from [NPSAS]? (If you are still in this same position, the next few questions ask you to think about your job when you first started teaching.)

- 1 = Regular, full- or part-time, elementary or secondary school teacher
- 2 = Itinerant teacher
- 3 = Support teacher
- 4 = Teacher's aide
- 5 = Short-term substitute
- 6 = Long-term substitute
- 7 = Student teacher
- 8 = Other teaching position

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree.

Instrument code: TTEACHR in (1 2)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REJBMY01

Starting date of [REJBTP01] position

In what month and year did you begin this position as a/an [REJBTP01]?

REJBMY01 is provided in the YYYYMM format.

Applies to: Respondents who were currently teaching or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position, and had already begun their teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8) and REJBFL01 ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REJBFL01

Starting [REJBTP01] position in fall

In what month and year did you begin this position as [REJBTP01]?

Check here if you have been hired for the fall but have not yet begun this position

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECNTY01

Itinerant teaching school 1: county

When you first started working as an itinerant teacher, in what county, school district, and state were you working? County:

Applies to: Respondents who were currently teachers or had taught as an itinerant teacher for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 = 2

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REDIST01

Itinerant teaching school 1: district

When you first started working as an itinerant teacher, in what county, school district, and state were you working? School district:

Applies to: Respondents who were currently teachers or had taught as an itinerant teacher for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 = 2

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RESTE01

Itinerant teaching school 1: state

When you first started working as an itinerant teacher, in what county, school district, and state were you working?

State:

- | | |
|--------------------------|---------------------------|
| 1 = Alabama | 34 = North Carolina |
| 2 = Alaska | 35 = North Dakota |
| 3 = Arizona | 36 = Ohio |
| 4 = Arkansas | 37 = Oklahoma |
| 5 = California | 38 = Oregon |
| 6 = Colorado | 39 = Pennsylvania |
| 7 = Connecticut | 40 = Rhode Island |
| 8 = Delaware | 41 = South Carolina |
| 9 = District of Columbia | 42 = South Dakota |
| 10 = Florida | 43 = Tennessee |
| 11 = Georgia | 44 = Texas |
| 12 = Hawaii | 45 = Utah |
| 13 = Idaho | 46 = Vermont |
| 14 = Illinois | 47 = Virginia |
| 15 = Indiana | 48 = Washington |
| 16 = Iowa | 49 = West Virginia |
| 17 = Kansas | 50 = Wisconsin |
| 18 = Kentucky | 51 = Wyoming |
| 19 = Louisiana | 52 = Puerto Rico |
| 20 = Maine | 53 = Canada |
| 21 = Maryland | 54 = American Samoa |
| 22 = Massachusetts | 55 = Guam |
| 23 = Michigan | 56 = Fed State Micronesia |
| 24 = Minnesota | 57 = Marshall Islands |
| 25 = Mississippi | 58 = Northern Mariana Isl |
| 26 = Missouri | 59 = Palau |
| 27 = Montana | 60 = U.S. Virgin Islands |
| 28 = Nebraska | 61 = American Military |
| 29 = Nevada | 62 = Mexico |
| 30 = New Hampshire | 63 = FOREIGN |
| 31 = New Jersey | COUNTRY (other than |
| 32 = New Mexico | Mexico and Canada) |
| 33 = New York | |

Applies to: Respondents who were currently teachers or had taught as an itinerant teacher for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 = 2

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RESCOD01

[REJBTP01] school: elementary/secondary number

[If COMPMODE = 1]

What is the name of the school? SAY: PLEASE BEAR WITH ME AS I CODE THIS.

[else]

What is the name of the school? To code your school:

1. Enter all or part of the school name. The city and state that you have entered on the previous form will appear. Click "Search for School" to display a list of matching schools. After the school list appears, click the Select button next to your school. If it is not listed, try searching with no city or no school name.

2. If you still cannot find your school, click the "None of the Above" button at the bottom of the list of search results. HINT: Entering a school name with the city and state will help to limit the number of schools displayed and reduce the time it will take for the school list to load. El/Sec number:

Applies to: Respondents who were currently teachers or had taught as a regular teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RESCH01

[REJBTP01] school: name

[If COMPMODE = 1]

What is the name of the school? SAY: PLEASE BEAR WITH ME AS I CODE THIS.

[else]

What is the name of the school? To code your school:

1. Enter all or part of the school name. The city and state that you have entered on the previous form will appear. Click "Search for School" to display a list of matching schools. After the school list appears, click the Select button next to your school. If it is not listed, try searching with no city or no school name.

2. If you still cannot find your school, click the "None of the Above" button at the bottom of the list of search results. HINT: Entering a school name with the city and state will help to limit the number of schools displayed and reduce the time it will take for the school list to load. School:

Applies to: Respondents who were currently teachers or had taught as a regular teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position and were unable to code their school in elementary and secondary school coder.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 3 6 8) and RESCOD01 in ('999996' '999997' '999998' '999999')

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RESCIT01

[REJBTP01] school: city

[If COMPMODE = 1]

What is the name of the school? SAY: PLEASE BEAR WITH ME AS I CODE THIS.

[else]

What is the name of the school? To code your school:

1. Enter all or part of the school name. The city and state that you have entered on the previous form will appear. Click "Search for School" to display a list of matching schools. After the school list appears, click the Select button next to your school. If it is not listed, try searching with no city or no school name.

2. If you still cannot find your school, click the "None of the Above" button at the bottom of the list of search results. HINT: Entering a school name with the city and state will help to limit the number of schools displayed and reduce the time it will take for the school list to load.

City:

Applies to: Respondents who were currently teachers or had taught as a regular teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position and were unable to code their school in elementary and secondary school coder.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 3 6 8) and RESCOD01 in ('999996' '999997' '999998' '999999')

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RESTAT01

[REJBTP01] school: state

[If COMPMODE = 1]

What is the name of the school? SAY: PLEASE BEAR WITH ME AS I CODE THIS.

[else]

What is the name of the school? To code your school:

1. Enter all or part of the school name. The city and state that you have entered on the previous form will appear. Click "Search for School" to display a list of matching schools. After the school list appears, click the Select button next to your school. If it is not listed, try searching with no city or no school name.

2. If you still cannot find your school, click the "None of the Above" button at the bottom of the list of search results. HINT: Entering a school name with the city and state will help to limit the number of schools displayed and reduce the time it will take for the school list to load.

State:

- | | |
|--------------------------|---------------------------|
| 1 = Alabama | 31 = New Jersey |
| 2 = Alaska | 32 = New Mexico |
| 3 = Arizona | 33 = New York |
| 4 = Arkansas | 34 = North Carolina |
| 5 = California | 35 = North Dakota |
| 6 = Colorado | 36 = Ohio |
| 7 = Connecticut | 37 = Oklahoma |
| 8 = Delaware | 38 = Oregon |
| 9 = District of Columbia | 39 = Pennsylvania |
| 10 = Florida | 40 = Rhode Island |
| 11 = Georgia | 41 = South Carolina |
| 12 = Hawaii | 42 = South Dakota |
| 13 = Idaho | 43 = Tennessee |
| 14 = Illinois | 44 = Texas |
| 15 = Indiana | 45 = Utah |
| 16 = Iowa | 46 = Vermont |
| 17 = Kansas | 47 = Virginia |
| 18 = Kentucky | 48 = Washington |
| 19 = Louisiana | 49 = West Virginia |
| 20 = Maine | 50 = Wisconsin |
| 21 = Maryland | 51 = Wyoming |
| 22 = Massachusetts | 52 = Puerto Rico |
| 23 = Michigan | 54 = American Samoa |
| 24 = Minnesota | 55 = Guam |
| 25 = Mississippi | 56 = Fed State Micronesia |
| 26 = Missouri | 57 = Marshall Islands |
| 27 = Montana | 58 = Northern Mariana Isl |
| 28 = Nebraska | 59 = Palau |
| 29 = Nevada | 60 = U.S. Virgin Islands |
| 30 = New Hampshire | 63 = Foreign Country |

Applies to: Respondents who were currently teachers or had taught as a regular teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position and were unable to code their school in elementary and secondary school coder.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 3 6 8) and RESCOD01 in ('999996' '999997' '999998' '999999')

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RES DST01

[REJBTP01] school: district

[If COMP MODE = 1]

What is the name of the school? SAY: PLEASE BEAR WITH ME AS I CODE THIS.

[else]

What is the name of the school? To code your school:
1. Enter all or part of the school name. The city and state that you have entered on the previous form will appear. Click "Search for School" to display a list of matching schools. After the school list appears, click the Select button next to your school. If it is not listed, try searching with no city or no school name.

2. If you still cannot find your school, click the "None of the Above" button at the bottom of the list of search results. HINT: Entering a school name with the city and state will help to limit the number of schools displayed and reduce the time it will take for the school list to load.

District:

Applies to: Respondents who were currently teachers or had taught as a regular teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position and were unable to code their school in elementary and secondary school coder.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 3 6 8) and RESCOD01 in ('999996' '999997' '999998' '999999')

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RES CNT01

[REJBTP01] school: county

[If COMP MODE = 1]

What is the name of the school? SAY: PLEASE BEAR WITH ME AS I CODE THIS.

[else]

What is the name of the school? To code your school:
1. Enter all or part of the school name. The city and state that you have entered on the previous form will appear. Click "Search for School" to display a list of matching schools. After the school list appears, click the Select button next to your school. If it is not listed, try searching with no city or no school name.

2. If you still cannot find your school, click the "None of the Above" button at the bottom of the list of search results. HINT: Entering a school name with the city and state will help to limit the number of schools displayed and reduce the time it will take for the school list to load.

County:

Applies to: Respondents who were currently teachers or had taught as a regular teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position and were unable to code their school in elementary and secondary school coder.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 3 6 8) and RESCOD01 in ('999996' '999997' '999998' '999999')

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RES TYP01

[REJBTP01] school: type

Is this school...

- 1 = A public school operated by a school/county district
- 2 = A private Catholic school
- 3 = A private school--other religious affiliation
- 4 = A private school--no religious affiliation
- 5 = A public school operated by state/federal agency (ex: BIA, DOD, prison school)
- 6 = Other (charter school, hospital school)

Applies to: Respondents who were currently teachers or had taught as a regular teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position and were unable to code their school in elementary and secondary school coder.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 3 6 8) and RESCOD01 in ('999996' '999997' '999998' '999999')

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RES GLO01

[REJBTP01] school: lowest grade level offered

What are the highest and lowest grade levels offered at this school?

Lowest grade level at school:

- 0 = Kindergarten
- 1 = First grade
- 2 = Second grade
- 3 = Third grade
- 4 = Fourth grade
- 5 = Fifth grade
- 6 = Sixth grade
- 7 = Seventh grade
- 8 = Eighth grade
- 9 = Ninth grade
- 10 = Tenth grade
- 11 = Eleventh grade
- 12 = Twelfth grade
- 13 = Ungraded

Applies to: Respondents who were currently teachers or had taught as a regular teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position and were unable to code their school in elementary and secondary school coder.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 3 6 8) and RESCOD01 in ('999996' '999997' '999998' '999999')

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RESGHI01

[REJBTP01] school: highest grade level offered

What are the highest and lowest grade levels offered at this school?

Highest grade level at school:

- 0 = Kindergarten
- 1 = First grade
- 2 = Second grade
- 3 = Third grade
- 4 = Fourth grade
- 5 = Fifth grade
- 6 = Sixth grade
- 7 = Seventh grade
- 8 = Eighth grade
- 9 = Ninth grade
- 10 = Tenth grade
- 11 = Eleventh grade
- 12 = Twelfth grade
- 13 = Ungraded

Applies to: Respondents who were currently teachers or had taught as a regular teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position and were unable to code their school in elementary and secondary school coder.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 3 6 8) and RESCOD01 in ('999996' '999997' '999998' '999999')

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REJBFP01

Full time or part time in [REJBTP01] position

When you first started working as a/an [REJBTP01], were you working full time or part time?

- 1 = Full time
- 2 = Part time

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REJBIC01

Base salary in [REJBTP01] position

When you first started working as a/an [REJBTP01], what was your base salary (prior to taxes and deductions) for the academic year?

Values greater than 125,000 when REICAM01 = 1, greater than 10,416.67

when REICAM01 = 2, greater than 4,807.69

when REICAM01 = 3, greater than 2,403.85

when REICAM01 = 4, greater than 480.77

when REICAM01 = 5, greater than 60.10

when REICAM01 = 6, or greater than 125,000

when REICAM01 = -9, were replaced with a -6 to

indicate the value was out of range. Each calculation was based on the respondent reporting more than \$125,000 per year. Values equal to 0 for all REICAM01 were also replaced with a -6 to indicate the value was out of range.

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REICAM01

Time frame for base salary in [REJBTP01] position

When you first started working as a/an [REJBTP01], what was your base salary (prior to taxes and deductions) for the academic year?

- 1 = Per year
- 2 = Per month
- 3 = Every two weeks
- 4 = Per week
- 5 = Per day
- 6 = Per hour

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REJBOS01

Other school-related income while in [REJBTP01] position

When you first started working as a/an [REJBTP01], what income did you receive for other school-related activities, such as coaching or sponsoring a student club? (Only include income from the school system that was not included in your base salary. If you did not earn any other income, please enter 0 in the box.)

Values greater than 40,000 when REJBOS01 = 1, greater than 3,333.33

when REJBOS01 = 2, greater than 1,538.46

when REJBOS01 = 3, greater than 769.23

when REJBOS01 = 4, greater than 153.85

when REJBOS01 = 5, greater than 19.23

when REJBOS01 = 6, or greater than 40,000

when REJBOS01 = -9, were replaced with a -6 to indicate the value was out of range. Each calculation was based on the respondent reporting more than \$40,000 per year.

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REOSAM01

Time frame for other school-related income in [REJBTP01] position

When you first started working as a/an [REJBTP01], what income did you receive for other school-related activities, such as coaching or sponsoring a student club? (Only include income from the school system that was not included in your base salary. If you did not earn any other income, please enter 0 in the box.)

1 = Per year

2 = Per month

3 = Every two weeks

4 = Per week

5 = Per day

6 = Per hour

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position, and indicated earning other school-related income while in their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8) and REJBOS01 ne 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REJBOT01

Additional income outside school system while in [REJBTP01] position

When you first started working as a/an [REJBTP01], what additional income did you earn from employment outside your school system? (If you did not earn any other income, please enter 0 in the box.)

Values greater than 40,000 when REJBOT01 = 1, greater than 3,333.33

when REJBOT01 = 2, greater than 1,538.46

when REJBOT01 = 3, greater than 769.23

when REJBOT01 = 4, greater than 153.85

when REJBOT01 = 5, greater than 19.23

when REJBOT01 = 6, or greater than 40,000

when REJBOT01 = -9, were replaced with a -6 to indicate the value was out of range. Each calculation was based on the respondent reporting more than \$40,000 per year.

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REOTAM01

Time frame for additional income while in [REJBTP01] position

When you first started working as a/an [REJBTP01], what additional income did you earn from employment outside your school system? (If you did not earn any other income, please enter 0 in the box.)

1 = Per year

2 = Per month

3 = Every two weeks

4 = Per week

5 = Per day

6 = Per hour

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position, and indicated earning additional income outside of the school system while in their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8) and REJBOT01 ne 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REGRLO01

Lowest grade level taught in [REJBTP01] position

When you first started working as a/an [REJBTP01], what were the lowest and highest grades you taught? (If you only taught one grade level, please select the same grade level for both the lowest and highest grades.)

Lowest grade level:

- | | |
|------------------|---------------------|
| 0 = Kindergarten | 7 = Seventh grade |
| 1 = First grade | 8 = Eighth grade |
| 2 = Second grade | 9 = Ninth grade |
| 3 = Third grade | 10 = Tenth grade |
| 4 = Fourth grade | 11 = Eleventh grade |
| 5 = Fifth grade | 12 = Twelfth grade |
| 6 = Sixth grade | 13 = Ungraded |

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REGRHI01

Highest grade level taught in [REJBTP01] position

When you first started working as a/an [REJBTP01], what were the lowest and highest grades you taught? (If you only taught one grade level, please select the same grade level for both the lowest and highest grades.)

Highest grade level:

- | | |
|------------------|---------------------|
| 0 = Kindergarten | 7 = Seventh grade |
| 1 = First grade | 8 = Eighth grade |
| 2 = Second grade | 9 = Ninth grade |
| 3 = Third grade | 10 = Tenth grade |
| 4 = Fourth grade | 11 = Eleventh grade |
| 5 = Fifth grade | 12 = Twelfth grade |
| 6 = Sixth grade | 13 = Ungraded |

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REGENA01

Subjects taught in [REJBTP01] position: elementary education

What subjects did you teach?

Elementary education (general curriculum in elementary or middle grades)

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REGENB01

Subjects taught in [REJBTP01] position: secondary education

What subjects did you teach?

Secondary education (general curriculum in middle or secondary grades)

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RESPED01

Subjects taught in [REJBTP01] position: special education

What subjects did you teach?

Special education

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REART01

Subjects taught in [REJBTP01] position: arts and music

What subjects did you teach?

Arts and music

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REENG01

Subjects taught in [REJBTP01] position: English or language arts

What subjects did you teach?

English or language arts

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REESL01

Subjects taught in [REJBTP01] position: English as a second language

What subjects did you teach?

English as a second language (ESL)

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REFLN01

Subjects taught in [REJBTP01] position: foreign languages

What subjects did you teach?

Foreign languages

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REHPE01

Subjects taught in [REJBTP01] position: health/physical education

What subjects did you teach?

Health, physical education

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REMTH01

Subjects taught in [REJBTP01] position: math or computer science

What subjects did you teach?

Mathematics or computer science

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RESCI01

Subjects taught in [REJBTP01] position: natural sciences

What subjects did you teach?

Natural sciences

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RESOC01

Subjects taught in [REJBTP01] position: social sciences

What subjects did you teach?

Social sciences

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REVOC01

Subjects taught in [REJBTP01] position: vocational/career/technical

What subjects did you teach?

Vocational, career, or technical education

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REMISC01

Subjects taught in [REJBTP01] position: miscellaneous

What subjects did you teach?

Miscellaneous (driver education, humanities or liberal studies, library or information science, military science or

ROTC, philosophy, religious studies, theology, or divinity)

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REOTH01

Subjects taught in [REJBTP01] position: other

What subjects did you teach?

Other

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REINT01

Participated in teacher internship program in first teaching job

In your first teaching job, did you participate in a teacher internship program? (By "teacher internship program" we mean a program in which you complete your teacher preparation coursework during your first year or two of teaching after receiving a bachelor's degree. Internship programs provide coursework and support from college or district faculty and result in a regular teaching certificate.)

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REIND01

Participated in formal teacher induction program in first teaching job

In your first teaching job, did you participate in a formal teacher induction program in which you were assigned a mentor teacher who provided guidance to you in your job?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REDSCP01

Feel prepared in first teaching job: classroom management

In your first teaching job, did you feel adequately prepared to...

Handle a range of classroom management or discipline situations?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REINVR01

Feel prepared in first teaching job: instructional methods

In your first teaching job, did you feel adequately prepared to...

Use a variety of instructional methods?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RETCH01

Feel prepared in first teaching job: teach subject matter

In your first teaching job, did you feel adequately prepared to...

Teach your subject matter?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REDISC01

Receive help in first teaching job: disciplining students

In your first teaching job, did you receive help from your school or school district in...

Disciplining students?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REMTD01

Receive help in first teaching job: selecting curriculum

In your first teaching job, did you receive help from your school or school district in...

Selecting and implementing appropriate instructional methods and curriculum?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECMNT01

Receive help in first teaching job: working with parents/community
In your first teaching job, did you receive help from your school or school district in...

Working with parents and the community?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught as a regular teacher, itinerant teacher, support teacher, long-term substitute, or in another teaching position for their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBTP01 in (1 2 3 6 8)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REJBCR01

Currently working for [REDIST01/RESCH01] as [REJBTP01]

[If REJBTP01 = 2]

Are you still working for [REDIST01] as an itinerant teacher?

[else if REJPTP01 in (1 3 6 8)]

Are you still working at [RESCH01] as a/an [REJBTP01]?

[else]

Are you still working as a/an [REJBTP01]?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree.

Instrument code: TTEACHR in (1 2)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REEDMY01

Date when left position as [REJBTP01]

[If REJBTP01 = 2]

In what month and year did you leave your position as an itinerant teacher for [REDIST01]?

[else if REJPTP01 in (1 3 6 8)]

In what month and year did you leave your position as a/an [REJBTP01] at [RESCH01]?

[else]

In what month and year did you leave your position as a/an [REJBTP01]?

REEDMY01 is provided in the YYYYMM format.

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree and were not working for the same school or district as in their first teaching position.

Instrument code: TTEACHR in (1 2) and REJBCR01 = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RESTTC01

Held any other teaching positions after working as [REJBTP01]

[If REJBTP01 = 2]

After working for [REDIST01] as an itinerant teacher, have you held any other K-12 teaching positions?

(Indicate "Yes" if you worked or are working in any type of substitute teacher, teacher's aide, student teaching, itinerant, or regular classroom teaching position at the K-12 level, after working in the teaching position about which you have just told us.)

[else]

After working [if REJPTP01 in (1 3 6 8)] at

[RESCH01] as a a/an [REJBTP01], have you held any other K-12 teaching positions? (Indicate "Yes" if you worked or are working in any type of substitute teacher, teacher's aide, student teaching, itinerant, or regular classroom teaching position at the K-12 level, after working in the teaching position about which you have just told us.)

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree.

Instrument code: TTEACHR in (1 2)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REMOVE

Plan to move into non-teaching job in K-12 education

[If TTEACHR = 1]

Do you plan to move into a non-teaching job in elementary or secondary education (e.g., administrator or school counselor)?

[else]

Do you plan to move into or continue in a non-teaching job in elementary or secondary education (e.g., administrator or school counselor)?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers, had taught since completing their bachelor's degree, had prepared to teach, or were currently considering teaching.

Instrument code: TTEACHR in (1 2 3 4)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RELVTRSF

Why left teaching: laid off or involuntarily transferred

Why did you leave teaching?

Laid off or involuntarily transferred

0 = No

1 = Yes

Applies to: Respondents who had taught since completing their bachelor's degree, but were not currently teaching.

Instrument code: (REJBCR01 ne 1 and REJBCR02 ne 1 and REJBCR03 ne 1 and REJBCR04 ne 1 and REJBCR05 ne 1 and REJBCR06 ne 1 and REJBCR07 ne 1) and (TTEACHR = 2 and (RESTWK02 ne 1 or RESTWK03 ne 1 or RESTWK04 ne 1 or RESTWK05 ne 1 or RESTWK06 ne 1 or RESTWK07 ne 1))

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RELVSAL

Why left teaching: inadequate salary/benefits

Why did you leave teaching?

Salary and/or benefits were inadequate

0 = No

1 = Yes

Applies to: Respondents who had taught since completing their bachelor's degree, but were not currently teaching.

Instrument code: (REJBCR01 ne 1 and REJBCR02 ne 1 and REJBCR03 ne 1 and REJBCR04 ne 1 and REJBCR05 ne 1 and REJBCR06 ne 1 and REJBCR07 ne 1) and (TTEACHR = 2 and (RESTWK02 ne 1 or RESTWK03 ne 1 or RESTWK04 ne 1 or RESTWK05 ne 1 or RESTWK06 ne 1 or RESTWK07 ne 1))

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RELVPERS

Why left teaching: personal reasons

Why did you leave teaching?

Personal life reasons (for example, health reasons, to care for child(ren), time to retire, change in residence)

0 = No

1 = Yes

Applies to: Respondents who had taught since completing their bachelor's degree, but were not currently teaching.

Instrument code: (REJBCR01 ne 1 and REJBCR02 ne 1 and REJBCR03 ne 1 and REJBCR04 ne 1 and REJBCR05 ne 1 and REJBCR06 ne 1 and REJBCR07 ne 1) and (TTEACHR = 2 and (RESTWK02 ne 1 or RESTWK03 ne 1 or RESTWK04 ne 1 or RESTWK05 ne 1 or RESTWK06 ne 1 or RESTWK07 ne 1))

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RELVCOND

Why left teaching: workplace conditions

Why did you leave teaching?

Dissatisfied with workplace conditions (for example, grade level or subject area, facilities, classroom resources, school safety, student discipline, administration)

0 = No

1 = Yes

Applies to: Respondents who had taught since completing their bachelor's degree, but were not currently teaching.

Instrument code: (REJBCR01 ne 1 and REJBCR02 ne 1 and REJBCR03 ne 1 and REJBCR04 ne 1 and REJBCR05 ne 1 and REJBCR06 ne 1 and REJBCR07 ne 1) and (TTEACHR = 2 and (RESTWK02 ne 1 or RESTWK03 ne 1 or RESTWK04 ne 1 or RESTWK05 ne 1 or RESTWK06 ne 1 or RESTWK07 ne 1))

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RELVCAR

Why left teaching: dissatisfied with teaching or wanted another career

Why did you leave teaching?

Dissatisfied with teaching as a career or wanted to pursue another career

0 = No

1 = Yes

Applies to: Respondents who had taught since completing their bachelor's degree, but were not currently teaching.

Instrument code: (REJBCR01 ne 1 and REJBCR02 ne 1 and REJBCR03 ne 1 and REJBCR04 ne 1 and REJBCR05 ne 1 and REJBCR06 ne 1 and REJBCR07 ne 1) and (TTEACHR = 2 and (RESTWK02 ne 1 or RESTWK03 ne 1 or RESTWK04 ne 1 or RESTWK05 ne 1 or RESTWK06 ne 1 or RESTWK07 ne 1))

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RELVOTH

Why left teaching: other reasons

Why did you leave teaching?

Other reason(s)

0 = No

1 = Yes

Applies to: Respondents who had taught since completing their bachelor's degree, but were not currently teaching.

Instrument code: (REJBCR01 ne 1 and REJBCR02 ne 1 and REJBCR03 ne 1 and REJBCR04 ne 1 and REJBCR05 ne 1 and REJBCR06 ne 1 and REJBCR07 ne 1) and (TTEACHR = 2 and (RESTWK02 ne 1 or RESTWK03 ne 1 or RESTWK04 ne 1 or RESTWK05 ne 1 or RESTWK06 ne 1 or RESTWK07 ne 1))

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RESTDISP

Teacher satisfaction: student discipline

[If TTEACHR = 1]

In your current teaching position, are you satisfied with each of the following...

[else]

In your most recent teaching position, were you satisfied with each of the following...

Student discipline and behavior?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree.

Instrument code: TTEACHR in (1 2)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RECLSIZE

Teacher satisfaction: class size

[If TTEACHR = 1]

In your current teaching position, are you satisfied with each of the following...

[else]

In your most recent teaching position, were you satisfied with each of the following...

Class size(s)?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree.

Instrument code: TTEACHR in (1 2)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REPNTSUP

Teacher satisfaction: parent support

[If TTEACHR = 1]

In your current teaching position, are you satisfied with each of the following...

[else]

In your most recent teaching position, were you satisfied with each of the following...

The support you receive from parents?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree.

Instrument code: TTEACHR in (1 2)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

READMSUP

Teacher satisfaction: administrative support

[If TTEACHR = 1]

In your current teaching position, are you satisfied with each of the following...

[else]

In your most recent teaching position, were you satisfied with each of the following...

The support you receive from administrators?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree.

Instrument code: TTEACHR in (1 2)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RESOCSUP

Teacher satisfaction: relationships with colleagues and supervisors

[If TTEACHR = 1]

In your current teaching position, are you satisfied with each of the following...

[else]

In your most recent teaching position, were you satisfied with each of the following...

Your relationships with colleagues and supervisors?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree.

Instrument code: TTEACHR in (1 2)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RETCHEFF

Teacher satisfaction: effectiveness as a teacher

[If TTEACHR = 1]

In your current teaching position, are you satisfied with each of the following...

[else]

In your most recent teaching position, were you satisfied with each of the following...

Your effectiveness as a teacher?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree.

Instrument code: TTEACHR in (1 2)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RETCHGRT

Aware of TEACH Grant Program

Are you aware of the TEACH Grant Program?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers, had taught since completing their bachelor's degree, had prepared to teach, or were currently considering teaching.

Instrument code: TTEACHR in (1 2 3 4)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RELNFRGV

Aware of teacher loan forgiveness programs

Are you aware of loan forgiveness programs which allow you to cancel all or part of your student loans in return for service to the community through teaching?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers, had taught since completing their bachelor's degree, had prepared to teach, or were currently considering teaching.

Instrument code: TTEACHR in (1 2 3 4)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RELNINCT

Teacher loan forgiveness programs influential

Did knowing about a teacher loan forgiveness program influence you to prepare to become a teacher?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree or had prepared to teach, and were aware of either the TEACH grant or a teaching loan forgiveness program.

Instrument code: TTEACHR in (1 2 3) and

(RETCHGRT = 1 or RELNFRGV = 1)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RELNPRT

Participated in teacher loan forgiveness program

Have you participated in a loan forgiveness program for teachers?

0 = No

1 = Yes

Applies to: Respondents who were currently teachers or had taught since completing their bachelor's degree and were aware of either the TEACH grant or a teaching loan forgiveness program.

Instrument code: TTEACHR in (1 2) and (RETCHGRT = 1 or RELNFRGV = 1)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

REPLNTCH

Plan to teach in K-12 classroom in future

Do you plan to teach in a K-12 classroom at some time in the future?

0 = No

1 = Yes

Appendix D. Facsimile of Full-scale Instrument—Section E. Teaching

Applies to: Respondents who majored in a teaching field, were preparing to teach, and had not applied for a teaching position since completing their bachelor's degree.

Instrument code: ((RBNPMSPE in (13.0101 13.0201 13.0202 13.0203 13.0299 13.1001 13.1003 13.1004 13.1005 13.1006 13.1007 13.1008 13.1009 13.1011 13.1012 13.1013 13.1014 13.1015 13.1016 13.1017 13.1018 13.1019 13.1099 13.1202 13.1203 13.1205 13.1206 13.1207 13.1208 13.1209 13.1210 13.1299 13.1301 13.1302 13.1303 13.1304 13.1305 13.1306 13.1307 13.1308 13.1309 13.1310 13.1311 13.1312 13.1314 13.1315 13.1316 13.1317 13.1318 13.1319 13.1320 13.1321 13.1322 13.1323 13.1324 13.1325 13.1326 13.1327 13.1328 13.1329 13.1330 13.1331 13.1332 13.1333 13.1335 13.1337 13.1338 13.1399 13.1401 13.1402 13.1499)) or (RBNP2SPE in (13.0101 13.0201 13.0202 13.0203 13.0299 13.1001 13.1003 13.1004 13.1005 13.1006 13.1007 13.1008 13.1009 13.1011 13.1012 13.1013 13.1014 13.1015 13.1016 13.1017 13.1018 13.1019 13.1099 13.1202 13.1203 13.1205 13.1206 13.1207 13.1208 13.1209 13.1210 13.1299 13.1301 13.1302 13.1303 13.1304 13.1305 13.1306 13.1307 13.1308 13.1309 13.1310 13.1311 13.1312 13.1314 13.1315 13.1316 13.1317 13.1318 13.1319 13.1320 13.1321 13.1322 13.1323 13.1324 13.1325 13.1326 13.1327 13.1328 13.1329 13.1330 13.1331 13.1332 13.1333 13.1335 13.1337 13.1338 13.1399 13.1401 13.1402 13.1499)) or [preloaded teaching major from NPSAS:08 FS] and TTEACHR = 3 and RETCHAPP ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

Section F: Student Background

RFDOBMY

Date of birth

In what month and year were you born?

RFDOBMY is provided in the YYYYMM format.

Applies to: All respondents.

Recode note: If [preloaded date of birth from NPSAS:08 FS] then RFDOBMY = [preloaded date of birth from NPSAS:08 FS]

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFCITZN

U.S. citizenship status

Are you a U.S. citizen?

1 = Yes

2 = No - Resident alien, permanent resident, or other eligible non-citizen; hold a temporary resident's card or other eligible non-citizen temporary resident's card

3 = No - Student visa, in the country on an F1 or F2 visa, or on a J1 or J2 exchange visitor visa

Applies to: All respondents.

Recode note: If [preloaded U.S. citizenship from NPSAS:08 FS] then RFCITZN = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFNSF9D

Method of U.S. citizenship

Are you a U.S. citizen...

RFNSF9D is based on item D9 from the NSF 2008 RCG paper-based questionnaire. D9 asks "(If U.S. citizen) Were you a U.S. citizen?"

1) Born in the United States, Puerto Rico, or another U.S. territory; 2) Born abroad of American parent(s); or 3) By naturalization."

For more information, see

<http://www.nsf.gov/statistics/srvyrecentgrads/>.

1 = Born in the United States, Puerto Rico, or another U.S. territory

2 = Born abroad of American parent(s)

3 = By naturalization

Applies to: Respondents who were U.S. citizens.

Instrument code: RFCITZN = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFNSF11

Foreign citizenship

Of which foreign country are you a citizen?

RDNSF11 is based on item D11 from the NSF 2008

RCG paper-based questionnaire. D11 asks "Of which foreign country are you a citizen?"

For more information, see

<http://www.nsf.gov/statistics/srvyrecentgrads/>.

100 = Albania

101 = Andorra

102 = Austria

103 = Belgium

104 = Bulgaria

105 = Slovakia

106 = Denmark

107 = Faroe Islands

108 = Finland

109 = France

110 = Germany

115 = Gibraltar

116 = Greece

117 = Hungary

118 = Iceland

119 = Ireland

120 = Italy

122 = Liechtenstein

123 = Luxembourg

124 = Malta

125 = Monaco

126 = Netherlands

127 = Norway

128 = Poland

129 = Portugal

132 = Romania

133 = San Marino

134 = Spain

136 = Sweden

137 = Switzerland

139 = England

140 = Scotland

141 = Wales

142 = Northern Ireland

143 = Guernsey

144 = Jersey

145 = Isle of Man

146 = Vatican City (Holy See)

155 = Czech Republic

157 = Slovenia

158 = Macedonia

159 = Bosnia and Herzegovina

160 = Croatia

182 = Estonia

183 = Latvia

Appendix D. Facsimile of Full-scale Instrument—Section F. Student Background

184 = Lithuania	300 = Bermuda
185 = Moldova	301 = Canada
186 = Belarus	302 = Greenland
187 = Russia (Russian Federation)	303 = Saint Pierre and Miquelon
188 = Kazakhstan	310 = Belize
189 = Armenia	311 = Costa Rica
190 = Azerbaijan	312 = El Salvador
191 = Georgia	313 = Guatemala
192 = Uzbekistan	314 = Honduras
193 = Ukraine	315 = Mexico
194 = Tajikistan	316 = Nicaragua
195 = Kyrgyzstan	317 = Panama
196 = Turkmenistan	330 = Anguilla
200 = Afghanistan	331 = Antigua and Barbuda
201 = Bahrain	332 = Aruba
202 = Bangladesh	333 = Bahamas
203 = Bhutan	334 = Barbados
204 = Brunei	335 = British Virgin Islands
205 = Myanmar (formerly Burma)	336 = Cayman Islands
206 = Cambodia	337 = Cuba
207 = China	338 = Dominica
208 = Cyprus	339 = Dominican Republic
209 = Hong Kong	340 = Grenada
210 = India	341 = Guadeloupe
211 = Indonesia	342 = Haiti
212 = Iran	343 = Jamaica
213 = Iraq	344 = Martinique
214 = Israel	345 = Montserrat
215 = Japan	346 = Netherlands Antilles
216 = Jordan	347 = Saint Barthelemy
218 = South Korea (Republic of Korea)	348 = Saint Kitts-Nevis
219 = North Korea (Democratic People's Republic of Korea)	349 = Saint Lucia
220 = Kuwait	350 = Saint Vincent and the Grenadines
221 = Laos	351 = Trinidad and Tobago
222 = Lebanon	352 = Turks and Caicos Islands
223 = Macau	375 = Argentina
224 = Malaysia	376 = Bolivia
225 = Maldives	377 = Brazil
226 = Mongolia	378 = Chile
227 = Nepal	379 = Colombia
228 = Oman	380 = Ecuador
229 = Pakistan	381 = Falkland Islands (Islas Malvinas)
231 = Philippines	382 = French Guiana
232 = Qatar	383 = Guyana
233 = Saudi Arabia	384 = Paraguay
234 = Singapore	385 = Peru
236 = Sri Lanka	386 = Suriname
237 = Syria (Syrian Arab Republic)	387 = Uruguay
238 = Taiwan	388 = Venezuela (Bolivarian Republic of)
239 = Thailand	400 = Algeria
240 = Turkey	401 = Angola
241 = United Arab Emirates	403 = Benin
242 = Viet Nam (Vietnam)	404 = Botswana
245 = Yemen	406 = Burkina Faso
248 = Gaza Strip	407 = Burundi
256 = West Bank	408 = Cameroon
	409 = Cape Verde

410 = Central African Republic	513 = New Caledonia
411 = Chad	514 = New Zealand
412 = Comoros	515 = Niue
413 = Congo (Republic of the)	516 = Norfolk Island
414 = Djibouti	517 = Palau
415 = Egypt	518 = Papua New Guinea
416 = Equatorial Guinea	519 = Pitcairn Islands
417 = Ethiopia	520 = Solomon Islands
419 = Gabon	521 = Tokelau
420 = Gambia	522 = Tonga
421 = Ghana	523 = Tuvalu
423 = Guinea	524 = Vanuatu
424 = Guinea-Bissau	525 = Wallis and Futuna Islands
425 = Côte d'Ivoire (Ivory Coast)	526 = Samoa
427 = Kenya	994 = Timor-Leste
428 = Lesotho	995 = Saint Martin
429 = Liberia	996 = Serbia
430 = Libya	997 = Montenegro
431 = Madagascar	998 = Kosovo
432 = Malawi	999 = Other
433 = Mali	
434 = Mauritania	
435 = Mayotte	
436 = Morocco	
437 = Mozambique	
438 = Namibia	
439 = Niger	
440 = Nigeria	
441 = Réunion	
442 = Rwanda	
443 = Sao Tome and Principe	
444 = Senegal	
445 = Mauritius	
446 = Seychelles	
447 = Sierra Leone	
448 = Somalia	
449 = South Africa	
450 = Saint Helena	
451 = Sudan	
452 = Swaziland	
453 = Tanzania (United Republic of)	
454 = Togo	
456 = Tunisia	
457 = Uganda	
458 = Western Sahara	
459 = Democratic Republic of the Congo	
460 = Zambia	
461 = Zimbabwe	
471 = Eritrea	
501 = Australia	
505 = Cook Islands	
507 = Fiji	
508 = French Polynesia	
509 = Kiribati	
510 = Marshall Islands	
511 = Fed State Micronesia	
512 = Nauru	

Applies to: Respondents who were not U.S. citizens.

Instrument code: RFCITZN in (2 3)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFENGL

English as native language

Is English your native language?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFNATIVE

Native language other than English

What language do you consider to be your native language? (Please choose your native language from the dropdown list below.)

- | | |
|---------------------------------------------------|-----------------|
| 1 = American Sign Language or other sign language | 15 = Korean |
| 2 = Arabic | 16 = Latin |
| 3 = Bengali | 17 = Malay |
| 4 = Chinese | 18 = Marathi |
| 5 = French or Canadian French | 19 = Portuguese |
| 6 = German | 20 = Punjabi |
| 8 = Greek (modern) | 21 = Russian |
| 10 = Hebrew (modern) | 22 = Spanish |
| 11 = Hindi | 23 = Swahili |
| 12 = Italian | 24 = Tamil |
| 13 = Japanese | 25 = Telugu |
| 14 = Javanese | 26 = Turkish |
| | 27 = Urdu |
| | 28 = Vietnamese |
| | 99 = Other |

Applies to: Respondents whose native language is not English.

Instrument code: RFENGL = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFOTLANG

Know a language other than English

Do you know any other language(s) or have you ever taken classes in a foreign language?

- 0 = No
- 1 = Yes

Applies to: Respondents whose native language is English.

Instrument code: RFENGL = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFLANGS

Best-known second language

Which second language do you know best? (Choose the second language you know best from the dropdown list below. If you consider yourself to have more than one second language, choose one of these languages.)

- | | |
|---------------------------------------------------|-----------------|
| 1 = American Sign Language or other sign language | 14 = Javanese |
| 2 = Arabic | 15 = Korean |
| 3 = Bengali | 16 = Latin |
| 4 = Chinese | 17 = Malay |
| 5 = French or Canadian French | 18 = Marathi |
| 6 = German | 19 = Portuguese |
| 7 = Greek (ancient) | 20 = Punjabi |
| 8 = Greek (modern) | 21 = Russian |
| 9 = Hebrew (Biblical) | 22 = Spanish |
| 10 = Hebrew (modern) | 23 = Swahili |
| 11 = Hindi | 24 = Tamil |
| 12 = Italian | 25 = Telugu |
| 13 = Japanese | 26 = Turkish |
| | 27 = Urdu |
| | 28 = Vietnamese |
| | 99 = Other |

Applies to: Respondents whose native language is English, who took classes in or knew another language, and had a second best language.

Instrument code: RFENGL = 1 and RFOTLANG = 1 and RFNOLNG ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFNOLNG

No second best language

Which second language do you know best? (Choose the second language you know best from the dropdown list below. If you consider yourself to have more than one second language, choose one of these languages.)

Do not have a second best language

- 0 = No
- 1 = Yes

Applies to: Respondents whose native language is English and took classes in or knew another language.

Instrument code: RFENGL = 1 and RFOTLANG = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFLNGCLS

Last time a non-English language class was taken

[If RFENGL = 0]

When was the last time you took a class to learn

[RFNATIVE]?

[else if RFOTLANG = 1]

When was the last time you took a class to learn

[RFLANGS]?

[else]

When was the last time you took a class to learn your other (non-English) language?

0 = Have never taken a formal class to learn [if RFENGL = 0] RFNATIVE [if RFOTLANG = 1] RFLANGS [else] your other (non-English) language]

1 = Within the last 2 years

2 = 2 to 5 years ago

3 = More than 5 years ago

4 = Currently taking a class

Applies to: Respondents whose native language is not English, or whose native language is English, who took classes in or knew another language, and had a second best language.

Instrument code: RFENGL = 0 or (RFENGL = 1 and RFOTLANG = 1 and RFNOLNG ne 1)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFLNGPST

Frequency of non-English language spoken at home

[If RFENGL = 0]

Growing up, did you speak [RFNATIVE] at home always, sometimes, or never?

[else if RFOTLANG = 1]

Growing up, did you speak [RFLANGS] at home always, sometimes, or never?

[else]

Growing up, did you speak your other (non-English) language at home always, sometimes, or never?

0 = Never

1 = Sometimes

2 = Always

Applies to: Respondents whose native language is neither English nor a dead language (includes ancient Greek, Biblical Hebrew, and Latin), or whose native language is English, who took classes in or knew another language, and had a second best language that was not a dead language.

Instrument code: (RFENGL = 0 and RFNATIVE not in (7 9 16)) or (RFENGL = 1 and RFOTLANG = 1 and RFNOLNG ne 1 and RFLANGS not in (7 9 16))

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFLNWRT

Proficiency of non-English language: writing

[If RFENGL = 0]

In comparison to your English, how proficient in

[RFNATIVE] are you in the following...

[else if RFOTLANG = 1]

In comparison to your English, how proficient in

[RFLANGS] are you in the following...

[else]

In comparison to your English, how proficient in your other (non-English) language are you in the following... Writing it?

1 = More proficient

2 = Same as

3 = Less proficient

4 = Not proficient at all

Applies to: Respondents whose native language is not English, a dead language (includes ancient Greek, Biblical Hebrew, and Latin), or sign language, or whose native language is English, who took classes in or knew another language, and had a second best language that was not a dead language or sign language.

Instrument code: (RFENGL = 0 and RFNATIVE not in (1 7 9 16)) or (RFENGL = 1 and RFOTLANG = 1 and RFNOLNG ne 1 and RFLANGS not in (1 7 9 16))

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFLNUND

Proficiency of non-English language: understanding speech

[If RFENGL = 0]

In comparison to your English, how proficient in

[RFNATIVE] are you in the following...

[else if RFOTLANG = 1]

In comparison to your English, how proficient in

[RFLANGS] are you in the following...

[else]

In comparison to your English, how proficient in your other (non-English) language are you in the following... Understanding it when it is spoken to you?

1 = More proficient

2 = Same as

3 = Less proficient

4 = Not proficient at all

Applies to: Respondents whose native language is not English, a dead language (includes ancient Greek, Biblical Hebrew, and Latin), or sign language, or whose native language is English, who took classes in or knew another language, and had a second best language that was not a dead language or sign language.

Instrument code: (RFENGL = 0 and RFNATIVE not in (1 7 9 16)) or (RFENGL = 1 and RFOTLANG = 1 and RFNOLNG ne 1 and RFLANGS not in (1 7 9 16))

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFLNSPEK

Proficiency of non-English language: speaking

[If RFENGL = 0]

In comparison to your English, how proficient in [RFNATIVE] are you in the following...

[else if RFOTLANG = 1]

In comparison to your English, how proficient in [RFLANGS] are you in the following...

[else]

In comparison to your English, how proficient in your other (non-English) language are you in the following...

Speaking it?

1 = More proficient

2 = Same as

3 = Less proficient

4 = Not proficient at all

Applies to: Respondents whose native language is not English, a dead language (includes ancient Greek, Biblical Hebrew, and Latin), or sign language, or whose native language is English, who took classes in or knew another language, and had a second best language that was not a dead language or sign language.

Instrument code: (RFENGL = 0 and RFNATIVE not in (1 7 9 16)) or (RFENGL = 1 and RFOTLANG = 1 and RFNOLNG ne 1 and RFLANGS not in (1 7 9 16))

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFLNREAD

Proficiency of non-English language: reading

[If RFENGL = 0]

In comparison to your English, how proficient in [RFNATIVE] are you in the following...

[else if RFOTLANG = 1]

In comparison to your English, how proficient in [RFLANGS] are you in the following...

[else]

In comparison to your English, how proficient in your other (non-English) language are you in the following...

Reading it?

1 = More proficient

2 = Same as

3 = Less proficient

4 = Not proficient at all

Applies to: Respondents whose native language is not English, a dead language (includes ancient Greek, Biblical Hebrew, and Latin), or sign language, or whose native language is English, who took classes in or knew another language, and had a second best language that was not a dead language or sign language.

Instrument code: (RFENGL = 0 and RFNATIVE not in (1 7 9 16)) or (RFENGL = 1 and RFOTLANG = 1 and RFNOLNG ne 1 and RFLANGS not in (1 7 9 16))

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFLNGCUR

Regularly interact with others in non-English language

[If RFENGL = 0]

Do you regularly interact with others in [RFNATIVE]?

[else if RFOTLANG = 1]

Do you regularly interact with others in [RFLANGS]?

[else]

Do you regularly interact with others in your other (non-English) language?

0 = No

1 = Yes

Applies to: Respondents whose native language is neither English nor a dead language (includes ancient Greek, Biblical Hebrew, and Latin), or whose native language is English, who took classes in or knew another language, and had a second best language that was not a dead language.

Instrument code: (RFENGL = 0 and RFNATIVE not in (7 9 16)) or (RFENGL = 1 and RFOTLANG = 1 and RFNOLNG ne 1 and RFLANGS not in (7 9 16))

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFLGCAR

Currently use non-English language in career

[If RFENGL = 0]

Do you currently use [RFNATIVE] in your career?

[else if RFOTLANG = 1]

Do you currently use [RFLANGS] in your career?

[else]

Do you currently use your other (non-English) language in your career?

0 = No

1 = Yes

Applies to: Respondents whose native language is not English, or whose native language is English, who took classes in or knew another language, and had a second best language.

Instrument code: RFENGL = 0 or (RFENGL = 1 and RFOTLANG = 1 and RFNOLNG ne 1)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFLNGPLN

Plan to use non-English language in career

[If RFENGL = 0 and RFLNGCAR = 1]

Do you plan to continue to use [RFNATIVE] in your career?

[else if RFENGL = 0]

Do you plan to use [RFNATIVE] in your career?

[else if RFOTLANG = 1 and RFLNGCAR = 1]

Do you plan to continue to use [RFLANGS] in your career?

[else if RFOTLANG = 1]

Do you plan to use [RFLANGS] in your career?

[else if RFLNGCAR = 1]

Do you plan to continue to use your other (non-English) language in your career?

[else]

Do you plan to use your other (non-English) language in your career?

0 = No

1 = Yes

Applies to: Respondents whose native language is not English, or whose native language is English, who took classes in or knew another language, and had a second best language.

Instrument code: RFENGL = 0 or (RFENGL = 1 and RFOTLANG = 1 and RFNOLNG ne 1)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFMILIT

Military status

Are you a veteran of the U.S. Armed Forces, or currently serving in the Armed Forces on active duty or in the reserves?

1 = Veteran

2 = Active duty

3 = Reserves

4 = None of the above

Applies to: All respondents.

Recode note: If RFCITZN = 3 then RFMILIT = 4

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFSTRES

State of residence

What is your state of legal residence?

1 = Alabama

2 = Alaska

3 = Arizona

4 = Arkansas

5 = California

6 = Colorado

7 = Connecticut

8 = Delaware

33 = New York

34 = North Carolina

35 = North Dakota

36 = Ohio

37 = Oklahoma

38 = Oregon

39 = Pennsylvania

40 = Rhode Island

9 = District of Columbia

10 = Florida

11 = Georgia

12 = Hawaii

13 = Idaho

14 = Illinois

15 = Indiana

16 = Iowa

17 = Kansas

18 = Kentucky

19 = Louisiana

20 = Maine

21 = Maryland

22 = Massachusetts

23 = Michigan

24 = Minnesota

25 = Mississippi

26 = Missouri

27 = Montana

28 = Nebraska

29 = Nevada

30 = New Hampshire

31 = New Jersey

32 = New Mexico

41 = South Carolina

42 = South Dakota

43 = Tennessee

44 = Texas

45 = Utah

46 = Vermont

47 = Virginia

48 = Washington

49 = West Virginia

50 = Wisconsin

51 = Wyoming

52 = Puerto Rico

53 = Canada

54 = American Samoa

55 = Guam

56 = Fed State Micronesia

57 = Marshall Islands

58 = Northern Mariana Isl

59 = Palau

60 = U.S. Virgin Islands

61 = American Military

62 = Mexico

63 = FOREIGN

COUNTRY (other than Mexico and Canada)

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVOTE

Registered to vote in U.S.

[If 52 <= RFSTRES <= 63]

Are you registered to vote in U.S. elections?

[else if RFSTRES ne -9]

Are you registered to vote in [RFSTRES]?

[else]

Are you registered to vote in the state in which you currently live?

0 = No

1 = Yes

Applies to: All respondents.

Recode note: If RFCITZN > 1 then RFVOTE = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFEVRVT

Ever voted in an election

Have you ever voted in a national, state, or local election?

0 = No

1 = Yes

Applies to: All respondents.

Recode note: 1) If [preloaded ever vote from NPSAS:08 FS] then RFEVRVT = 1 2) If RFCITZN > 1 then RFEVRVT = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFHRELOC

Live more than 50 miles from high school

Do you live more than 50 miles from where you last attended high school?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFCRELOC

Live more than 50 miles from NPSAS

Do you live more than 50 miles from [NPSAS]?

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFMARR

Current marital status

What is your current marital status?

1 = Single, never married

2 = Married

3 = Living as married (or cohabiting)

4 = Separated

5 = Divorced

6 = Widowed

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFALONE

Household composition: live alone

With whom are you currently living?

Live alone

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFSPDP

Household composition: live with spouse or domestic partner

With whom are you currently living?

Spouse or domestic partner

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFDPNTS

Household composition: live with children or dependents

With whom are you currently living?

Children and/or other dependents

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFPARIL

Household composition: live with parents or in-laws

With whom are you currently living?

Parents or in-laws

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFHOTH

Household composition: someone not listed

With whom are you currently living?

Another person or people not listed

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFDEPS

Any dependents

[If RFMARR = 2]

Do you or your spouse have any dependents that you support financially?

[else]

Do you have any dependents that you support financially?

0 = No

1 = Yes

Applies to: All respondents.

Recode note: If RFDEPS = 0 then RFDEPS = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFDEP2

Number of dependents

[If RFMARR = 2]

How many dependents do you or your spouse support financially?

[else]

How many dependents do you support financially?

Values greater than 7 were replaced with a -6 to indicate the value was out of range.

0 = 0

1 = 1

2 = 2

3 = 3

4 = 4

5 = 5

6 = 6

Applies to: All respondents.

Recode note: If RFDEPS = 0 then RFDEP2 = 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFDAGE

Age of youngest dependent

[If RFDEP2 > 1]

What is the age of your youngest dependent?

[else if RFDEP2 = 1]

How old is your dependent?

[else]

What is the age of your youngest dependent? (If you have only one dependent, please report the age of that dependent.)

0 = Less than one year

13 = 13

1 = 1

14 = 14

2 = 2

15 = 15

3 = 3

16 = 16

4 = 4

17 = 17

5 = 5

18 = 18

6 = 6

19 = 19

7 = 7

20 = 20

8 = 8

21 = 21

9 = 9

22 = 22

10 = 10

23 = 23

11 = 11

24 = 24

12 = 12

25 = Over 24

Applies to: Respondents with dependents.

Instrument code: RFDEPS = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFHOUSE

Own home and/ or pay rent

[If RFMARR = 2]

Do you own a home, pay rent, or both own a home and pay rent?

(If someone other than your spouse makes housing payments on your behalf, please answer, "Neither own a home nor pay rent.")

[else if RFMARR = 3]

Do you own a home, pay rent, or both own a home and pay rent? (If someone other than your domestic partner makes housing payments on your behalf, please answer, "Neither own a home nor pay rent.")

[else]

Do you own a home, pay rent, or both own a home and pay rent? (If someone makes housing payments on your behalf, please answer,

"Neither own a home nor pay rent.")

0 = Neither own home(s) nor pay rent

1 = Own home(s) (pay mortgage)

2 = Pay rent

3 = Both own home(s) and pay rent

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFMTGAMT

Monthly rent or mortgage payment amount

[If RFMARR = 2]

How much is your monthly [if RFHOUSE = 1] mortgage

{else if RFHOUSE = 2} rent {else if RFHOUSE = 3} housing] payment?

If you share [if RFHOUSE = 1] payment of your mortgage

{else if RFHOUSE = 2} payment of your rent {else if RFHOUSE = 3}

your housing payment(s)] with anybody other than your spouse, please indicate the amount for which you and your spouse are responsible.

[else if RFMARR = 3]

How much is your monthly [if RFHOUSE = 1] mortgage

{else if RFHOUSE = 2} rent {else if RFHOUSE = 3} housing] payment?

If you share [if RFHOUSE = 1] payment of your mortgage

{else if RFHOUSE = 2} payment of your rent {else if RFHOUSE = 3}

your housing payment(s)] with anybody other than your domestic partner, please indicate the amount for which you and your domestic partner are responsible.

[else]

How much is your monthly [if RFHOUSE = 1] mortgage

{else if RFHOUSE = 2} rent {else if RFHOUSE = 3} housing] payment?

If you share [if RFHOUSE = 1] payment of your mortgage

{else if RFHOUSE = 2} payment of your rent {else if RFHOUSE = 3}

your housing payment(s)] with others, please indicate the amount for which you are responsible.

Values between 0 and 50 or greater than 5,000 were replaced with a -6 to indicate the value was out of range.

Applies to: Respondents who made rent or mortgage payments.

Instrument code: RFHOUSE ne 0

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFCARAMT

Car payment amount

[If RFMARR in (2 3)]

What is the total amount you pay each month for your vehicle (car, truck, motorcycle, or other vehicle) loan(s) or lease(s)? (If someone other than your [if RFMARR = 2] spouse {else if RFMARR = 3} domestic partner] makes vehicle loan or lease payments on your behalf, please answer, "Do not have a vehicle loan or lease.") [else]

What is the total amount you pay each month for your vehicle (car, truck, motorcycle, or other vehicle) loan(s) or lease(s)? (If someone makes vehicle loan or lease payments on your behalf, please answer, "Do not have a vehicle loan or lease.")

Values greater than 1,500 were replaced with a -6 to indicate the value was out of range.

Applies to: Respondents who made monthly vehicle payments.

Instrument code: RFNOCAR ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFNOCAR

No monthly car payment

[If RFMARR in (2 3)]

What is the total amount you pay each month for your vehicle (car, truck, motorcycle, or other vehicle) loan(s) or lease(s)? (If someone other than your [if RFMARR = 2] spouse {else if RFMARR = 3} domestic partner] makes vehicle loan or lease payments on your behalf, please answer, "Do not have a vehicle loan or lease.") [else]

What is the total amount you pay each month for your vehicle (car, truck, motorcycle, or other vehicle) loan(s) or lease(s)? (If someone makes vehicle loan or lease payments on your behalf, please answer, "Do not have a vehicle loan or lease.")

Do not have a vehicle loan or lease

0 = No

1 = Yes

Applies to: All respondents.

Recode note: If RFCARAMT = 0 then RFNOCAR = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFINCOM

Income in 2008

[If RFMARR in (2 3)]

Excluding your [if RFMARR = 2} spouse's {else if RFMARR = 3} domestic partner's] income, what was your income from all sources (including income from work, investments, alimony, etc.), prior to taxes and deductions, for calendar year 2008? (If you are unsure of the exact amount, provide your best estimate.)

[else]

What was your income from all sources (including income from work, investments, alimony, etc.), prior to taxes and deductions, for calendar year 2008? (If you are unsure of the exact amount, provide your best estimate.) Values between 0 and 100 or greater than 250,000 were replaced with a -6 to indicate the value was out of range.

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFINEST

Income in 2008: estimate

[If RFMARR in (2 3)]

Excluding your [if RFMARR = 2} spouse's {else if RFMARR = 3} domestic partner's] income, please indicate the range that best estimates your income from all sources (including income from work, investments, alimony, etc.), prior to taxes and deductions, for calendar year 2008.

[else]

Please indicate the range that best estimates your income from all sources for 2008 (including income from work, investments, alimony, etc.) prior to taxes and deductions for calendar year 2008.

- 1 = Less than \$20,000
- 2 = \$20,000-\$29,999
- 3 = \$30,000-\$39,999
- 4 = \$40,000-\$49,999
- 5 = \$50,000-\$59,999
- 6 = \$60,000-\$69,999
- 7 = \$70,000-\$79,999
- 8 = \$80,000-\$89,999
- 9 = \$90,000-\$99,999
- 10 = \$100,000-\$149,999
- 11 = Above \$150,000

Applies to: Respondents who did not provide an income amount.

Instrument code: RFINCOM = -9

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFSPEMP

Spouse employed in 2008

Did your spouse work for pay in calendar year 2008?

0 = No

1 = Yes

Applies to: Married respondents.

Instrument code: RFMARR = 2

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFINCSP

Spouse's income in 2008

How much would you estimate your spouse earned from all sources (including income from work, investments, alimony, etc.), prior to taxes and deductions, in calendar year 2008?

Values between 0 and 100, greater than 250,000, or values equal to 0 when RFSPEMP = 1, were replaced with a -6 to indicate the value was out of range.

Applies to: Married respondents who were married to their spouse in 2008.

Instrument code: RFMARR = 2 and RFSPNOT ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFSPNOT

Not married to spouse in 2008

How much would you estimate your spouse earned from all sources (including income from work, investments, alimony, etc.), prior to taxes and deductions, in calendar year 2008?

Check here if you were not married to your spouse in 2008

0 = No

1 = Yes

Applies to: Married respondents.

Instrument code: RFMARR = 2

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFINSRA

Spouse's income in 2008: estimate

Please indicate the range that best estimates your spouse's income from all sources (including income from work, investments, alimony, etc.), prior to taxes and deductions, in calendar year 2008.

- 1 = Less than \$20,000
- 2 = \$20,000-\$29,999
- 3 = \$30,000-\$39,999
- 4 = \$40,000-\$49,999
- 5 = \$50,000-\$59,999
- 6 = \$60,000-\$69,999
- 7 = \$70,000-\$79,999
- 8 = \$80,000-\$89,999
- 9 = \$90,000-\$99,999
- 10 = \$100,000-\$149,999
- 11 = Above \$150,000

Applies to: Married respondents who were married to their spouse in 2008 and did not provide an income amount for their spouse.

Instrument code: RFMARR = 2 and RFINCSP = -9
Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFSPLV

Spouse's education level

What is the highest level of education that your spouse has completed?

- 1 = Did not complete high school
- 2 = High school diploma or equivalent
- 3 = Vocational or technical training
- 4 = Less than 2 years of college
- 5 = Associate's degree
- 6 = 2 or more years of college but no degree
- 7 = Bachelor's degree
- 8 = Graduate degree (Master's, PhD, EdD, or professional degree such as dentistry, law, medicine, pharmacy, divinity/theology)

Applies to: Married respondents.

Instrument code: RFMARR = 2

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFSPCOL

Spouse attended college or graduate school in 2008–09 school year

Did your spouse attend college or graduate school during the 2008–09 school year?

- 0 = No
- 1 = Yes, full time
- 2 = Yes, part time

Applies to: Married respondents whose spouse completed high school.

Instrument code: RFMARR = 2 and RFSPVLV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFSPLN

Spouse had student loans

[If RFSPVLV in (2 3 4 5 6)]

Did your spouse take out any student loans for his/her undergraduate education?

[else]

Did your spouse take out any student loans for his/her undergraduate and/or graduate education?

0 = No

1 = Yes

Applies to: Married respondents whose spouse completed high school.

Instrument code: RFMARR = 2 and RFSPVLV ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFSPAMT

Spouse's student loan amount

What is the total amount your spouse has borrowed in student loans? (If you are unsure of the amount, please provide your best estimate.)

Values equal to 0 or greater than 224,000 were replaced with a -6 to indicate the value was out of range.

Applies to: Married respondents whose spouse had student loans.

Instrument code: RFMARR = 2 and RFSPLN = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFSPOWE

Spouse's student loan amount owed

[If RFSPAMT missing]

How much of your spouse's student loans are still owed? [else]

How much of the \$[RFSPAMT] in total student loans does your spouse still owe?

Values greater than 224,000 were replaced with a -6 to indicate the value was out of range.

Applies to: Married respondents whose spouse had student loans.

Instrument code: RFMARR = 2 and RFSPLN = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFSPLNPY

Spouse's monthly payment on student loans

How much does your spouse pay each month for his or her student loans?

Values greater than 2,000 were replaced with a -6 to indicate the value was out of range.

Applies to: Married respondents whose spouse had student loans for which they still owed an amount and were repaying.

Instrument code: RFMARR = 2 and RFSPLN = 1 and RFSPWE not in (0 -9) and RFSPLNNP ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFSPLNNP

Spouse's monthly payment on student loans: not in repayment

How much does your spouse pay each month for his or her student loans?

Not yet in repayment

0 = No

1 = Yes

Applies to: Married respondents whose spouse had student loans for which they still owed an amount.

Instrument code: RFMARR = 2 and RFSPLN = 1 and RFSPWE not in (0 -9)

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFCOMSRV

Volunteered in last 12 months

Have you performed any community service or volunteer work in the last 12 months? Please do not include paid community service, court-ordered service, or charitable donations (such as food, clothing, money, etc.).

0 = No

1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVLTUT

Volunteer type: tutoring/ education-related

What types of community service or volunteer work have you performed in the last 12 months?

Tutoring or education-related work with kids

0 = No

1 = Yes

Applies to: Respondents who volunteered in the last 12 months.

Instrument code: RFCOMSRV = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVLKIDS

Volunteer type: other work with kids

What types of community service or volunteer work have you performed in the last 12 months?

Other work with kids (coaching, sports, Big Brother or Big Sister, etc.)

0 = No

1 = Yes

Applies to: Respondents who volunteered in the last 12 months.

Instrument code: RFCOMSRV = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVLFUND

Volunteer type: fundraising (political and non-political)

What types of community service or volunteer work have you performed in the last 12 months?

Fundraising (political or non-political)

0 = No

1 = Yes

Applies to: Respondents who volunteered in the last 12 months.

Instrument code: RFCOMSRV = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVLSOUP

Volunteer type: homeless shelter or soup kitchen

What types of community service or volunteer work have you performed in the last 12 months?

Homeless shelter or soup kitchen

0 = No

1 = Yes

Applies to: Respondents who volunteered in the last 12 months.

Instrument code: RFCOMSRV = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVLNBRH

Volunteer type: neighborhood improvement

What types of community service or volunteer work have you performed in the last 12 months?

Neighborhood improvement, clean-up, or Habitat for Humanity

0 = No

1 = Yes

Applies to: Respondents who volunteered in the last 12 months.

Instrument code: RFCOMSRV = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVLHEAL

Volunteer type: health services, hospital, nursing home or group home

What types of community service or volunteer work have you performed in the last 12 months?

Health services, hospital, nursing home or group home

0 = No

1 = Yes

Applies to: Respondents who volunteered in the last 12 months.

Instrument code: RFCOMSRV = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVLCHUR

Volunteer type: service to a church or other religious organization

What types of community service or volunteer work have you performed in the last 12 months?

Service to a church or other religious organization

0 = No

1 = Yes

Applies to: Respondents who volunteered in the last 12 months.

Instrument code: RFCOMSRV = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVLNON

Volunteer type: service to nonprofit organizations

What types of community service or volunteer work have you performed in the last 12 months?

Service to nonprofit organizations (work for Salvation Army, United Cerebral Palsy, etc.)

0 = No

1 = Yes

Applies to: Respondents who volunteered in the last 12 months.

Instrument code: RFCOMSRV = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVLCOM

Volunteer type: service to the community

What types of community service or volunteer work have you performed in the last 12 months?

Service to the community (volunteer firefighter, for town festival, ombudsman, polling station assistant, etc.)

0 = No

1 = Yes

Applies to: Respondents who volunteered in the last 12 months.

Instrument code: RFCOMSRV = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVLOTH

Volunteer type: other service not listed

What types of community service or volunteer work have you performed in the last 12 months?

Another type of service not listed

0 = No

1 = Yes

Applies to: Respondents who volunteered in the last 12 months.

Instrument code: RFCOMSRV = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVLHRS

Number of hours volunteered

On average, how many hours did you volunteer during the last year?

Values greater than 2,400 when RFVLAMT = 1, greater than 200

when RFVLAMT = 2, greater than 46.15

when RFVLAMT = 3, or greater than 2,400

when RFVLAMT = -9, were replaced with a -6 to indicate the value was out of range. Each calculation was based on the respondent reporting more than 2,400 hours per year. Values equal to 0 for all RFVLAMT were also replaced with a -6 to indicate the value was out of range.

Applies to: Respondents who volunteered in the last 12 months more than one time.

Instrument code: RFCOMSRV = 1 and RFVLONE ne 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVLAMT

Time frame for volunteer hours

On average, how many hours did you volunteer during the last year?

- 1 = Per year
- 2 = Per month
- 3 = Per week

Applies to: Respondents who volunteered in the last 12 months more than one time.

Instrument code: RFCOMSRV = 1 and RFVLONE ne 1
 Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVLONE

One time volunteer event

On average, how many hours did you volunteer during the last year?

One time event

- 0 = No
- 1 = Yes

Applies to: Respondents who volunteered in the last 12 months.

Instrument code: RFCOMSRV = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFVLFUT

Likely to continue volunteering in next 12 months

[If no items checked from (RFVLTUT, RFVLKIDS, RFVLFUND, RFVLSOUP, RFVLNBRH, RFVLHEAL, RFVLCHUR, RFVLNON, RFVLCOM, RFVLOTH)]

Are you likely to continue to volunteer in the next 12 months?

[else if only one item checked from (RFVLTUT, RFVLKIDS, RFVLFUND, RFVLSOUP, RFVLNBRH, RFVLHEAL, RFVLCHUR, RFVLNON, RFVLCOM, RFVLOTH)]

You indicated participating in the following volunteer activity in the last 12 months: [List item checked from (RFVLTUT, RFVLKIDS, RFVLFUND, RFVLSOUP, RFVLNBRH, RFVLHEAL, RFVLCHUR, RFVLNON, RFVLCOM, RFVLOTH)] Are you likely to continue this volunteer work in the next 12 months?

[else]

You indicated participating in the following volunteer activities in the last 12 months: [List items checked from (RFVLTUT, RFVLKIDS, RFVLFUND, RFVLSOUP, RFVLNBRH, RFVLHEAL, RFVLCHUR, RFVLNON, RFVLCOM, RFVLOTH)] Are you likely to continue any of this volunteer work in the next 12 months?

- 0 = No
- 1 = Yes

Applies to: Respondents who volunteered in the last 12 months.

Instrument code: RFCOMSRV = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFDISSEN

Disability: sensory impairment

These last few questions will help us better understand the educational and employment experiences of people with disabilities.

Do you have a sensory impairment, such as blindness, deafness, or a severe vision or hearing impairment, that has lasted for 6 months or more?

- 0 = No
- 1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFDISMOB

Disability: mobility impairment

Do you have a mobility impairment that has substantially limited one or more basic physical activities, such as walking, climbing stairs, reaching, lifting, or carrying, for 6 months or more?

- 0 = No
- 1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFDISOTH

Disability: other

Excluding any disabilities already mentioned, do you have any other physical, mental, emotional, or learning condition that has lasted 6 months or more?

- 0 = No
- 1 = Yes

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

RFMAIN

Main disability or impairment

What is the main type of condition or impairment that you have?

- 1 = Hearing impairment (i.e., deaf or hard of hearing)
- 2 = Blindness or visual impairment that cannot be corrected by wearing glasses
- 3 = Speech or language impairment
- 4 = Orthopedic or mobility impairment
- 5 = Specific learning disability or dyslexia
- 6 = Attention deficit disorder (ADD)
- 7 = Health impairment or problem
- 8 = Mental, emotional, or psychiatric condition
- 9 = Depression
- 10 = Developmental disability
- 11 = Brain injury
- 12 = Other

Applies to: Respondents with a sensory, mobility, or other type of disability.

Instrument code: RFDISSEN = 1 or RFDISMOB = 1 or RFDISOTH = 1

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: B&B:08/09 full scale student interview

TAGE

Age as of July 1, 2009

Internal variable TAGE calculates age as of July 1, 2009 based on RFDOBMY.

Applies to: All respondents.

Perturbation procedures were applied to this and other variables to protect against disclosure of individual information.

Source: NPSAS:08 full scale student interview

Appendix E

Interviewer Training Agenda and Training Manual Contents

B&B:08/09 FS Telephone Interviewer Training Agenda September 8-10, 2009

Day 1 (Tuesday, September 8)

6:00-6:10	Welcome and Introduction	10 minutes
6:10-6:25	Overview of Study	15 minutes
6:25-6:30	Your Role as a Telephone Interviewer	5 minutes
6:30-6:35	Confidentiality	5 minutes
6:35-6:45	Telephone Interviewer/Staff Introductions	10 minutes
6:45-7:05	Conversational Interviewing Discussion	20 minutes
7:05-7:35	Demonstration Interview	30 minutes
7:35-7:45	Frequently Asked Questions	10 minutes
7:45-8:00	<i>Break</i>	15 minutes
8:00-8:30	Front End Overview/Refusal Avoidance	30 minutes
8:30-9:25	Introduction to Interview/QxQ Review	55 minutes
9:25-9:30	<i>Break</i>	5 minutes
9:30-9:55	B&B Jeopardy	25 minutes
9:55-10:00	Wrap-Up/Questions/"Exit Tickets"	5 minutes

Day 2 (Wednesday, September 9)

6:00-6:05	Welcome/Review	5 minutes
6:05-6:10	Frequently Asked Questions	5 minutes
6:10-7:00	QxQ Review	50 minutes
7:00-7:10	<i>Break</i>	10 minutes
7:10-7:45	Coding Practice	35 minutes
7:45-8:30	Round Robin #1	45 minutes
8:30-8:35	Frequently Asked Questions	5 minutes
8:35-9:55	Paired Mock Interviews	80 minutes
9:55-10:00	Wrap-Up/Questions	5 minutes

Day 3 (Thursday, September 10)

6:00-6:35	Coding Certification	35 minutes
6:35-6:45	Frequently Asked Questions	10 minutes
6:45-7:25	Round Robin Mock Interview #2	40 minutes
7:25-7:40	<i>Break</i>	15 minutes
7:40-8:20	Front End Practice/Refusal Avoidance	40 minutes
8:20-8:25	Training Evaluations	5 minutes
8:25-10:00	Certification Interviews/FAQ Certification	95 minutes

2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09) Welcome to the B&B:08/09 CAPI Field Interviewer Training!

Training Agenda (12/1, 12/2, and 12/3 Morning Sessions)

8:30 – Welcome and Training overview– Linda Bailey-Stone

8:40 – Review of equipment requirements needed to complete training

8:45 – Review of all materials and computer components received prior to training

- Laptop
- Manuals
- CAFs, Mock training cases, presentation handouts
- Confirmation of completion of Pre-training and coding exercise quiz

8:55 – FAQs and Tracing overview

9:25 – Pre-quiz results summary

9:45 – Active listening and conversational interviewing

10:00 – *Break*

10:30 – Instrument and Coding

11:50 – Training review and wrap-up

Training Agenda (12/1, 12/2, and 12/3 Afternoon Sessions)

12:30 – Welcome and Training overview– Linda Bailey-Stone

12:40 – Review of equipment requirements needed to complete training

12:45 – Review of all materials and computer components received prior to training

- Laptop
- Manuals
- CAFs, Mock training cases, presentation handouts
- Confirmation of completion of Pre-training and coding exercise quiz

12:55 – FAQs and Tracing overview

1:25 – Pre-quiz results summary

1:45 – Active listening and conversational interviewing

2:00 – *Break*

2:30 – Instrument and Coding

3:50 – Training review and wrap-up

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Brochure

What have you been doing since you earned your bachelor's degree?

The Baccalaureate and Beyond Longitudinal Study wants to know!

What have we learned from previous rounds of B&B?

The current Baccalaureate and Beyond Longitudinal Study (B&B) is the third in a series of National Center for Education Statistics (NCES) studies focused on bachelor's degree recipients. From B&B sample members who earned their bachelor's degrees during academic year 1999-2000, we learned that:

- on average, graduates working full-time earned \$33,100 per year in 2001;
- thirty-three percent completed their bachelor's degrees within 4 years of their high school graduation, 23 percent in 4 to 5 years, and the rest took longer;
- twenty-two percent enrolled in a graduate or advanced degree program following graduation; and
- sixty-two percent borrowed money to help pay for their undergraduate education—with an average amount borrowed of \$17,800 and an average of \$15,100 still owed 1 year after graduation.

To see more results, go to <http://nces.ed.gov/pubsearch/pubinfo.asp?pubid=20032003185.pdf>.

For assistance with B&B, please contact the help desk or visit the study website:

<https://surveys.nces.ed.gov/bb/>

B&B Help Desk
1-877-262-4440 (toll-free)
bbemail@rti.org

If you have questions or concerns, you may contact the following:

Dr. Jennifer Wine
B&B Project Director (RTI)
1-866-602-8227 (toll-free)
jwine@rti.org

Ted Socha
B&B Project Officer (NCES)
1-202-502-7383
tedsocha@ed.gov

If you have questions about your rights as a study participant, please call RTI's Institutional Review Board at 1-866-214-2043 (toll-free) or send an e-mail message to ipeds@rti.org regarding IRB number 13881.



National Center for Education Statistics
Institute of Education Sciences
U.S. Department of Education



**BACCALAUREATE
AND BEYOND
LONGITUDINAL STUDY**



ies NATIONAL CENTER FOR
EDUCATION STATISTICS
Institute of Education Sciences

NCES 2009-200



What is B&B?

The Baccalaureate and Beyond Longitudinal Study (B&B) will survey more than 17,000 graduates, selected from approximately 1,100 U.S. colleges and universities, to find out about their experiences in the early years since earning a bachelor's degree.

The survey will collect information from graduates about their experience in the workforce, their experience in and future plans for graduate and other education, and their personal and professional goals.

Your participation is critical to the success of the study!

How was I chosen to participate?

In 2008, you were selected to participate in the National Postsecondary Student Aid Study (NPSAS), which is designed to help better understand how students and their families pay for college. NPSAS participants who completed requirements for their bachelor's degrees during the 2007-08 academic year are also being asked to participate in B&B.

When will the study be conducted?

Beginning in the summer of 2009, students who completed requirements for their bachelor's degrees during the 2007-08 academic year will be contacted to complete B&B online. Students who do not complete the online interview within 4 weeks will be contacted by a professionally trained interviewer and asked to complete the interview over the telephone. B&B participants will be interviewed for the second follow-up in 2012.

How do I participate?

You may complete the B&B interview in one of two ways:

1. Online. Go to the study website at <http://survey.npsas.ed.gov/bb/>. Then, simply enter your Study ID and password and select login.

If you need assistance, call the B&B Help Desk at 1-877-262-4440 (toll-free) or contact us via e-mail at bbemail@rti.org.

2. By telephone. If you prefer to complete the B&B interview by telephone, call the B&B Help Desk at 1-877-262-4440 (toll-free) to speak with a professionally trained interviewer.

How long will it take?

On average, the interview lasts about 25 minutes. Interview time will vary depending on your answers and internet connection speed, if completing online.

Are there any benefits or risks?

The risk of participation in this study relates to data security. Given the strict confidentiality and security procedures in place, risks to participation are minimal. While there are no specific benefits to you for participating in B&B, your participation will help ensure the success of the study and help policymakers better understand the experiences of recent bachelor's degree recipients.

How can I get a copy of the results?

Publications from previous studies are available free of charge on the B&B website at <http://nces.ed.gov/ipeds/bbb/>. Results from the current study are scheduled to be released in fall 2012 and will be posted on the B&B website as soon as they are available.

Why should I participate?

Policymakers and researchers use B&B data to better understand how earning a bachelor's degree affects the lives of students and their transition to the workforce. Your responses, combined with institutional records, provide information that helps

- researchers understand the variety of ways people attain bachelor's degrees;
- assess the outcomes of postsecondary education; and
- describe the early experiences of graduates in the workforce, particularly in teaching-related fields.

Although participation in this study is voluntary, there is no substitute for your responses.

Will my answers be kept confidential?

Yes, federal law requires that we protect your privacy. Your responses will be used only for statistical purposes and will not be disclosed, or used, in identifiable form for any other purpose, except as required by law.

Confidentiality procedures are reviewed and approved by RTI's Institutional Review Board in the Office of Research Protection. Your answers are secured behind firewalls and are encrypted during internet transmission using Secure Socket Layer (SSL) protocol. All data entry modules are password protected and require the user to log in before accessing confidential data. Project staff may be severely fined or imprisoned for disclosure of individual responses.

Who is conducting the study?

B&B is sponsored by the National Center for Education Statistics (NCES) in the U.S. Department of Education's Institute of Education Sciences. The study is being conducted under contract by RTI International, a nonprofit research organization based in North Carolina. B&B is authorized by the Education Sciences Reform Act of 2002 (Public Law 107-279).

RTI International is a Trade Name of Research Triangle Institute.

Initial Contact Letter to Parents – Base-Year Respondent

(Date)

«Cpname»
«CpAddr1»
«CpAddr2»
«CpCity», «CpState» «CpZip» «CpZip4»

«caseid» (Study ID number)
«panelinfo» (RTI use only)

Dear «Cpfname» «Cplname»,

The U.S. Department of Education’s National Center for Education Statistics (NCES) is conducting an important study of students who graduated from college during the 2007-08 school year. The Baccalaureate and Beyond Longitudinal Study (B&B) will help educators, researchers, and policymakers better understand how earning a bachelor’s degree affects students’ lives and choices about further education and work. Out of all 2007-08 college graduates in the United States, «sPfname» was selected to participate in B&B. The enclosed brochure describes B&B, findings from the 2001 B&B study, and our strict confidentiality procedures.

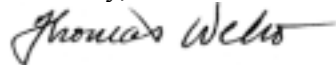
We will be contacting «sPfname» and other study participants in July to ask questions about «pronoun3» education and work experiences after graduation. We are asking for your help in updating our records so that we will be able to get in touch with «pronoun2». Only a limited number of people are selected for this study so it is extremely important that we be able to contact «pronoun2». **If «sPfname» completes the interview by the date provided in the announcement letter we will be sending in July, «pronoun1» will receive a «IncAmt» incentive as a token of our appreciation.**

Before data collection can begin, we need your help to update our records for «sPfname» «sPlname». ***Please take a few minutes right now to update the enclosed Address Update Information sheet and return it in the enclosed postage-paid envelope.***

NCES has contracted with RTI International to conduct the B&B study on its behalf. Please be assured that both NCES and RTI follow strict confidentiality procedures to protect the privacy of study participants and the confidentiality of the information collected. If you would like more information about the B&B study, please visit <http://surveys.nces.ed.gov/bb/> or call the RTI study director, Dr. Jennifer Wine, toll-free at 1-866-662-8227.

We sincerely appreciate your assistance and thank you in advance for helping us conduct this important study.

Sincerely,



Thomas Weko
Associate Commissioner
Postsecondary Studies Division
National Center for Education Statistics
Enclosure

«span_fill1» «Cpfname» «Cplname»:

El Centro Nacional de Estadísticas de la Educación (NCES, por sus siglas en inglés) del Departamento de Educación de los Estados Unidos, está realizando un importante estudio sobre estudiantes que se graduaron de la universidad durante el año escolar 2007-2008. El Estudio Longitudinal de Bachillerato y Estudios Posteriores (B&B, por sus siglas en inglés) ayudará a los educadores, así como a las personas que realizan estudios y a los encargados de crear políticas a entender mejor de qué manera el obtener un título de bachiller afecta la vida de los estudiantes y las opciones que tienen para continuar su educación y obtener empleo. De todos los graduados de la universidad durante el año escolar 2007-2008 en los Estados Unidos, «sPfname» fue seleccionado(a) para participar en el Estudio Longitudinal de Bachillerato y Estudios Posteriores.

Nosotros nos estaremos comunicando con «sPfname» y otros participantes del estudio en julio para hacerles preguntas sobre sus experiencias con la educación y el empleo después de la graduación. Le pedimos su ayuda para actualizar nuestros registros de manera que podamos comunicarnos con «span_pronoun2». Sólo se seleccionó a un número limitado de personas para este estudio. Por lo tanto, es sumamente importante que nos podamos comunicar con «span_pronoun2». **Si «sPfname» completa la entrevista a más tardar en la fecha que se indica en la carta que enviaremos en julio anunciando la recopilación de datos del estudio, «span_pronoun1» recibirá un incentivo por «IncAmt» dólares, como muestra de nuestro agradecimiento.**

Antes de poder empezar la recopilación de datos, necesitamos su ayuda para actualizar nuestros registros con respecto a «sPfname». ***Por favor, tome unos minutos de su tiempo en este momento para actualizar el Formulario de actualización del domicilio que se adjunta a la presente y envíelo de regreso en el sobre con porte postal prepagado que también adjuntamos.***

El Centro Nacional de Estadísticas de la Educación ha contratado a RTI International para que realice el Estudio Longitudinal de Bachillerato y Estudios Posteriores en su nombre. Le aseguramos que tanto RTI como El Centro Nacional de Estadísticas de la Educación siguen procedimientos estrictos de confidencialidad para proteger la privacidad de los participantes del estudio y la confidencialidad de la información que se recopile. Si usted desea más información sobre el estudio, por favor, visite el sitio de Internet <http://surveys.nces.ed.gov/bb/> (disponible en inglés) o llame a la directora del estudio en RTI, Dra. Jennifer Wine, al número de teléfono gratuito 1-866-662-8227.

Apreciamos sinceramente su ayuda y le agradecemos de antemano por su ayuda a realizar este importante estudio.

Initial Contact Letter to Parents – Base-Year Nonrespondent

(Date)

«Cpname» «caseid» (Study ID number)
«CpAddr1» «panelinfo» (RTI use only)
«CpAddr2»
«CpCity», «CpState» «CpZip» «CpZip4»

Dear «Cpfname» «Cplname»,

The U.S. Department of Education’s National Center for Education Statistics (NCES) is conducting an important study of students who graduated from college during the 2007-08 school year. The Baccalaureate and Beyond Longitudinal Study (B&B) will help educators, researchers, and policymakers better understand how earning a bachelor’s degree affects students’ lives and choices about further education and work. Out of all 2007-08 college graduates in the United States, «fname» was selected to participate in B&B. The enclosed brochure describes B&B, findings from the 2001 B&B study, and our strict confidentiality procedures.

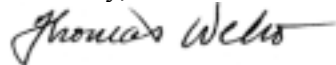
We will be contacting «fname» and other study participants in October to ask questions about «pronoun3» education and work experiences after graduation. We are asking for your help in updating our records so that we will be able to get in touch with «pronoun2». Only a limited number of people are selected for this study so it is extremely important that we be able to contact «pronoun2». **If «fname» completes the interview by the date provided in the announcement letter we will be sending in October, «pronoun1» will receive a \$50 incentive as a token of our appreciation.**

Before data collection can begin, we need your help to update our records for «fname» «lname». ***Please take a few minutes right now to update the enclosed Address Update Information sheet and return it in the enclosed postage-paid envelope.***

NCES has contracted with RTI International to conduct the B&B study on its behalf. Please be assured that both NCES and RTI follow strict confidentiality procedures to protect the privacy of study participants and the confidentiality of the information collected. If you would like more information about the B&B study, please visit <http://surveys.nces.ed.gov/bb/> or call the RTI study director, Dr. Jennifer Wine, toll-free at 1-866-662-8227.

We sincerely appreciate your assistance and thank you in advance for helping us conduct this important study.

Sincerely,



Thomas Weko
Associate Commissioner
Postsecondary Studies Division
National Center for Education Statistics
Enclosure

«span_fill1» «Cpfname» «Cplname»:

El Centro Nacional de Estadísticas de la Educación (NCES, por sus siglas en inglés) del Departamento de Educación de los Estados Unidos, está realizando un importante estudio sobre estudiantes que se graduaron de la universidad durante el año escolar 2007-2008. El Estudio Longitudinal de Bachillerato y Estudios Posteriores (B&B, por sus siglas en inglés) ayudará a los educadores, así como a las personas que realizan estudios y a los encargados de crear políticas a entender mejor de qué manera el obtener un título de bachiller afecta la vida de los estudiantes y las opciones que tienen para continuar su educación y obtener empleo. De todos los graduados de la universidad durante el año escolar 2007-2008 en los Estados Unidos, «sPfname» fue «span_fill2» para participar en el Estudio Longitudinal de Bachillerato y Estudios Posteriores.

Nosotros nos estaremos comunicando con «sPfname» y otros participantes del estudio en octubre para hacerles preguntas sobre sus experiencias con la educación y el empleo después de la graduación. Le pedimos su ayuda para actualizar nuestros registros de manera que podamos comunicarnos con «span_pronoun2». Sólo se seleccionó a un número limitado de personas para este estudio. Por lo tanto, es sumamente importante que nos podamos comunicar con «span_pronoun2». **Si «sPfname» completa la entrevista a más tardar en la fecha que se indica en la carta que enviaremos en octubre anunciando la recopilación de datos del estudio, «span_pronoun1» recibirá un incentivo por \$50 dólares, como muestra de nuestro agradecimiento.**

Antes de poder empezar la recopilación de datos, necesitamos su ayuda para actualizar nuestros registros con respecto a «sPfname» «sPlname». ***Por favor, tome unos minutos de su tiempo en este momento para actualizar el Formulario de actualización del domicilio que se adjunta a la presente y envíelo de regreso en el sobre con porte postal prepagado que también adjuntamos.***

El Centro Nacional de Estadísticas de la Educación ha contratado a RTI International para que realice el Estudio Longitudinal de Bachillerato y Estudios Posteriores en su nombre. Le aseguramos que tanto RTI como El Centro Nacional de Estadísticas de la Educación siguen procedimientos estrictos de confidencialidad para proteger la privacidad de los participantes del estudio y la confidencialidad de la información que se recopile. Si usted desea más información sobre el estudio, por favor, visite el sitio de Internet <http://surveys.nces.ed.gov/bb/> (disponible en inglés) o llame a la directora del estudio en RTI, Dra. Jennifer Wine, al número de teléfono gratuito 1-866-662-8227.

Apreciamos sinceramente su ayuda y le agradecemos de antemano por su ayuda a realizar este importante estudio.

Address Update Sheet – Parent

Baccalaureate and Beyond Longitudinal Study (B&B) Address Update Information (Parent Version)

Study ID number: «caseid»

1. Please review «fname»'s current address and phone numbers displayed on the left side of the box below. Check here if all information preprinted in this section is **entirely correct**.....

If «pronoun3» address is not entirely correct or current, **please update** it in the space provided on the right side of the box.

«fname» «mname» «lname» «suffix» «addr1» «addr2» «city», «state» «zip» «zip4» («area1») «phone1» «stupanelinfo»	First Name: _____ Last Name: _____ Suffix (e.g. Jr., Sr.) _____ Street Address: _____ _____ City: _____ State: _____ Zip: _____ Home phone: (____) _____ Work phone: (____) _____ Cell phone: (____) _____
-----------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

2. We will send «fname» an e-mail to let «pronoun2» know when data collection has begun. Please provide an e-mail address that we can use to contact «pronoun2».

Primary e-mail address: _____

Alternative e-mail address: _____

Thank you for your assistance.

Please return this page in the enclosed postage-paid envelope or return to:

RTI International
 ATTN: Jeff Franklin (0209777.600.332)
 PO Box 12194
 Research Triangle Park, NC 27709-9935

Estudio Longitudinal de Bachillerato y Estudios Posteriores (B&B) Formulario de actualización del domicilio

Identificación del estudio: «caseid»

1. Por favor, revise la dirección y números de teléfono actuales de «fname» que aparecen en el lado izquierdo del recuadro que está a continuación. Marque aquí si toda la información impresa en esta sección es **correcta en su totalidad**.....

*Si la dirección de «span_pronoun2» no es correcta en su totalidad o no está actualizada, **favor de poner al día** la información en el espacio que se proporciona en el lado derecho del recuadro.*

«fname» «mname» «lname» «suffix» «addr1» «addr2» «city», «state» «zip» «zip4» («area1») «phone1» «stupanelinfo»	Nombre: _____ Apellido: _____ Sufijo (por ejemplo, Jr., Sr.) _____ Dirección: _____ _____ Ciudad: _____ Estado: _____ Código postal: _____ Teléfono de la casa: (____) _____ Teléfono del trabajo: (____) _____ Teléfono celular: (____) _____
-----------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

2. Le enviaremos a «fname» para hacerle saber que ha comenzado la recopilación de datos. Por favor, proporcione una dirección de correo electrónico que podamos usar para comunicarnos con «span_pronoun2».

Dirección primaria de correo electrónico: _____

Dirección alterna de correo electrónico: _____

Muchas gracias por su ayuda.

Favor de devolver este formulario en sobre adjunto con porte postal prepagado a:

RTI International
 ATTN: Jeff Franklin (0209777.600.332)
 PO Box 12194
 Research Triangle Park, NC 27709-9935

Initial Contact Letter to Students – Base-Year Respondent

(Date)

«fname» «mname» «lname» «suffix»
«addr1»
«addr2»
«city», «state» «zip» «zip4»

«caseid» (Study ID number)
«panelinfo» (RTI use only)

Dear «fname»,

Last year you participated in the National Postsecondary Student Aid Study (NPSAS) for the U.S. Department of Education’s National Center for Education Statistics (NCES). That study answered a lot of questions about how students pay for college. The first report from NPSAS was recently released and is available at <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009166>.

We are now asking for your help again. This summer we will be contacting you to ask some follow up questions as part of the Baccalaureate and Beyond Longitudinal Study (B&B). Data collected from B&B will help educators, researchers, and policymakers better understand how earning a bachelor’s degree affects students’ lives and choices about further education and work.

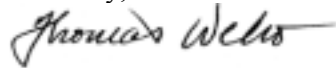
When B&B data collection begins in **July**, you will receive a letter in a large white envelope that will provide specific information about how you can participate. The package will also include a \$5 bill as a token of our appreciation for your participation. **The letter will explain that if you complete the 25 minute interview on the Web by the date indicated, you will receive an additional \$30 as a token of our appreciation. In the meantime, we need to update our contact information for you.**

Please help us by providing your mailing address, telephone numbers, and e-mail addresses on the enclosed address update sheet and returning it in the enclosed postage-paid envelope. To find out more about the B&B study or to update your contact information online, visit the study’s website at <https://surveys.nces.ed.gov/bb/> and enter the Study ID number provided in this letter.

NCES has contracted with RTI International to conduct the B&B study on its behalf. The enclosed brochure provides a brief description of B&B, findings from the 2001 B&B study, and a summary of our strict confidentiality procedures. If you have additional questions or concerns about the study after reviewing this material, please call the RTI study director, Dr. Jennifer Wine, toll-free at 1-866-662-8227.

We thank you in advance for your participation in this important study. Your cooperation is greatly appreciated.

Sincerely,



Thomas Weko
Associate Commissioner
Postsecondary Studies Division
National Center for Education Statistics
Enclosure

To update your contact information online: Go to: https://surveys.nces.ed.gov/bb/ Enter Study ID number: «caseid»

Estimado(a) «fname»,

El año pasado usted participó en el Estudio Nacional sobre Asistencia Económica para Estudiantes en Escuelas Postsecundarias (NPSAS), para el Centro Nacional de Estadísticas de la Educación del Departamento de Educación de los Estados Unidos (NCES). Ese estudio respondió muchas preguntas acerca de cómo los estudiantes pagan para ir a la universidad. El primer reporte de NPSAS se ha hecho público hace poco y está disponible en el Internet:

<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009166>.

Ahora necesitamos su ayuda nuevamente. Este verano nos estaremos comunicando con usted para hacerle algunas preguntas de seguimiento como parte del Estudio Longitudinal de Bachillerato y Estudios Posteriores (B&B). Los datos obtenidos este estudio ayudarán a los educadores, así como a las personas que realizan estudios y a los encargados de crear políticas a entender mejor de qué manera el obtener un título de bachiller afecta la vida de los estudiantes y las opciones que tienen para continuar su educación y obtener empleo.

Cuando la recopilación de datos del estudio B&B empiece en **julio**, usted recibirá una carta en un sobre grande de color blanco que le proporcionará información específica acerca de cómo puede participar. El sobre también incluirá un billete de \$5 dólares como muestra de nuestro agradecimiento por su participación. **La carta le explicará que si completa la entrevista de 25 minutos en el Internet hasta la fecha indicada, usted recibirá \$30 dólares adicionales como muestra de nuestro agradecimiento. Mientras tanto, necesitamos actualizar la información de cómo comunicarnos con usted.**

Por favor, le pedimos su ayuda al proporcionarnos su dirección, números de teléfono y direcciones de correo electrónico en el formulario de actualización del domicilio que adjuntamos y que lo devuelva en el sobre adjunto con porte postal prepago. Para obtener más información sobre el estudio B&B o para actualizar sus datos personales en el Internet, puede visitar el sitio web del estudio <https://surveys.nces.ed.gov/bb/> y escribir el número de identificación del estudio que se proporciona en esta carta.

El Centro Nacional de Estadísticas de la Educación ha contratado a RTI International para realizar el Estudio Longitudinal de Bachillerato y Estudios Posteriores en su nombre. El folleto adjunto le proporciona una breve descripción del estudio B&B, así como los hallazgos del estudio en el año 2001 y un resumen de nuestros procedimientos estrictos de confidencialidad. Si tiene alguna pregunta o preocupación adicional acerca del estudio después de haber revisado este material, por favor, llame a la directora del estudio, Dra. Jennifer Wine, al número de teléfono gratuito 1-866-662-8227.

Le agradecemos de antemano por su participación en este importante estudio. Apreciamos sinceramente su cooperación.

Para actualizar su información en Internet, sírvase ir a: https://surveys.nces.ed.gov/bb/ Escriba el número de identificación del estudio: «caseid»

Initial Contact Letter to Students – Base-Year Nonrespondent

(Date)

«stu_name»
«addr1»
«addr2»
«citystzip»

Study ID: «caseid»

Dear «fname»,

You have been randomly selected to take part in the Baccalaureate and Beyond Longitudinal Study (B&B), sponsored by the National Center for Education Statistics (NCES) in the U.S. Department of Education's Institute of Education Sciences. B&B will collect education, employment, and other information from you and students like you who graduated from college during the 2007–08 school year. Data collected from B&B will help educators, researchers, and policymakers better understand how earning a bachelor's degree affects students' lives and choices about further education and work. Only a limited number of people are selected for this study, so your participation is extremely important.

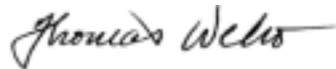
When B&B data collection begins in **October**, you will receive a letter in a large white envelope that will provide specific information about how to participate. That package will also include a \$5 bill as a token of our appreciation for your participation. **The letter will explain that if you complete the 25-minute interview on the Web by the date indicated, you will receive an additional \$50 as a token of our appreciation.**

In the meantime, we need to update our contact information for you. Please help us by providing your mailing address, telephone number(s), and e-mail address(es) on the enclosed address update sheet and returning it in the enclosed postage-paid envelope. To update your information online, or to find out more about B&B, visit the study's website at <https://surveys.nces.ed.gov/bb/>.

NCES has contracted with RTI International to conduct B&B on its behalf. The enclosed brochure provides a brief description of B&B, findings from the 2001 study, and a summary of our strict confidentiality procedures. If you have additional questions or concerns about the study after reviewing this material, please call the RTI study director, Dr. Jennifer Wine, toll-free at 1-866-662-8227.

We thank you in advance for your participation in this important study. Your cooperation is greatly appreciated.

Sincerely,



Thomas Weko
Associate Commissioner
Postsecondary Studies Division
National Center for Education Statistics
Enclosure

RTI USE ONLY: «panelinfo»

«stu_name»
«addr1»
«addr2»
«citystzip»

Número de identificación del estudio: «caseid»

«span_fill» «fname»,

Usted ha sido seleccionado(a) al azar para tomar parte en el Estudio Longitudinal de Bachillerato y Estudios Posteriores (B&B), el cual es patrocinado por el Centro Nacional de Estadísticas sobre la Educación (NCES) en el Instituto de Ciencias de la Educación del Departamento de Educación de los Estados Unidos. El estudio B&B recopilará información sobre la educación, empleo y otra información acerca de usted y estudiantes como usted que se graduaron de la universidad durante el año académico 2007-2008. Los datos obtenidos del estudio B&B ayudarán a los educadores, a las personas que realizan estudios y a los legisladores a entender mejor de qué manera el obtener un título de bachillerato afecta las vidas de los estudiantes y las opciones que tienen de continuar con su educación y obtener un empleo. Solamente un número limitado de personas son seleccionadas para este estudio, de modo que su participación es sumamente importante.

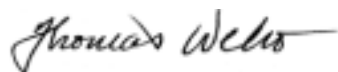
Quando la recopilación de datos del estudio B&B empiece en **octubre**, usted recibirá una carta en un sobre grande de color blanco que le proporcionará información específica acerca de cómo participar. Este sobre también incluirá un billete de \$5 dólares como muestra de nuestro agradecimiento por su participación. **La carta le explicará que si usted completa la entrevista de 25 minutos en el Internet hasta la fecha indicada, usted recibirá \$50 dólares adicionales como muestra de nuestro agradecimiento.**

Mientras tanto, necesitamos actualizar la información de cómo comunicarnos con usted. Por favor, le pedimos su ayuda al proporcionarnos su dirección, números de teléfono y direcciones de correo electrónico en el formulario de actualización del domicilio que adjuntamos y que lo devuelva en el sobre adjunto con porte postal prepagado. Para obtener más información sobre el estudio B&B puede visitar el sitio web del estudio en <https://surveys.nces.ed.gov/bb/>.

El Centro Nacional de Estadísticas sobre la Educación ha contratado a RTI International para realizar el Estudio Longitudinal de Bachillerato y Estudios Posteriores en su nombre. El folleto adjunto le proporciona una breve descripción del estudio B&B, así como los hallazgos del estudio en el año 2001 y un resumen de nuestros procedimientos estrictos de confidencialidad. Si tiene alguna pregunta o preocupación adicional acerca del estudio después de haber revisado este material, por favor, llame a la directora del estudio, Dra. Jennifer Wine, al número de teléfono gratuito 1-866-662-8227.

Le agradecemos de antemano por su participación en este importante estudio. Apreciamos sinceramente su cooperación.

Atentamente,



Thomas Weko
Comisionado Asociado
División de Estudios Postsecundarios
Centro Nacional de Estadísticas sobre la Educación

Anexos

PARA USO DE RTI SOLAMENTE: «panelinfo»

Address Update Sample Member

Baccalaureate and Beyond Longitudinal Study (B&B) Address Update Information (Student Version)

Study ID number: «caseid»

1. Please review your current address and phone numbers displayed on the left side of the box below. Check here if all information preprinted in this section is **entirely correct**.....

If your address is not entirely correct or current, **please update** it in the space provided on the right side of the box. If you prefer to update your locating information online, visit our secure website at <https://surveys.nces.ed.gov/bb/> and refer to your study ID number **«caseid»**.

«stu_name» «addr1» «addr2» «citystzip» («area») «phone» «panelinfo»	First Name: _____ Last Name: _____ Suffix (e.g. Jr., Sr.) _____ Street Address: _____ _____ City: _____ State: _____ Zip: _____ Home phone: (____) _____ Work phone: (____) _____ Cell phone: (____) _____
------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

2. We will send an e-mail to let you know when data collection has begun. Please provide your e-mail address(es) that we can use to contact you.

Primary e-mail address: _____
 Alternate e-mail address: _____

3. Would you like us to send a text message on the cell phone listed above when data collection is about to begin? (Please note: standard text messaging rates apply.) Yes No

If yes, please give us the name of your cell phone service provider (e.g. AT&T, Verizon, Sprint, etc.) to ensure the message is sent to the correct carrier.

Cell phone service provider: _____

Thank you for your assistance.

Please return this page in the enclosed postage-paid envelope or return to:
 RTI International
 ATTN: Jeff Franklin (0209777.600.332)
 PO Box 12194
 Research Triangle Park, NC 27709-9935

Estudio Longitudinal de Bachillerato y Estudios Posteriores (B&B) Formulario de actualización del domicilio

Número de identificación del estudio: «caseid»

1. Por favor, revise su dirección y números de teléfono actuales que aparecen en el lado izquierdo del recuadro que está a continuación. Revise si toda la información impresa en esta sección es **correcta en su totalidad**.....

Si su dirección no es correcta en su totalidad o no está actualizada, **favor de poner al día** la información en el espacio que se proporciona en el lado derecho del recuadro. Si usted prefiere actualizar la información en Internet, visite nuestra página segura en el sitio web <https://surveys.nces.ed.gov/bb/> y haga referencia al número de identificación del estudio **«caseid»**

«stu_name» «addr1» «addr2» «citystzip» («area») «phone» «panelinfo»	Nombre: _____ Apellido: _____ Sufijo (por ejemplo: Jr., Sr.) _____ Dirección: _____ _____ Ciudad: _____ Estado: _____ Código postal: _____ Teléfono de la casa: (____) _____ Teléfono del trabajo: (____) _____ Teléfono celular: (____) _____
------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

2. Le enviaremos un correo electrónico para hacerle saber que ha comenzado la recopilación de datos. Por favor, proporcione una dirección de correo electrónico que podamos usar para comunicarnos con usted.

Dirección primaria de correo electrónico: _____

Dirección alterna de correo electrónico: _____

3. ¿Le gustaría que le enviemos un mensaje de texto al teléfono celular arriba mencionado cuando esté por comenzar la recopilación de datos? (Por favor, tome en cuenta que se aplican las tarifas regulares de mensajes de texto.) Sí No

Si respondió sí, por favor, dénos el nombre del proveedor de servicios de su teléfono celular (por ejemplo: AT&T, Verizon, Sprint, etc.), para asegurarnos que el mensaje sea enviado a la compañía correcta.

Proveedor de servicios del teléfono celular: _____

Muchas gracias por su ayuda.

Favor de devolver este formulario en el sobre adjunto con porte postal prepagado o devolverlo a:

RTI International

ATTN: Jeff Franklin (0209777.600.332)

PO Box 12194

Research Triangle Park, NC 27709-9935

Data Collection Announcement Letter to Students

(Date)

«fname» «mname» «lname» «suffix»
«addr1»
«addr2»
«city», «state» «zip»«zip4»

Study ID: «caseid»

Dear «fname»,

Interviews for the Baccalaureate and Beyond Longitudinal Study (B&B) are now being conducted. The interview will take about 25 minutes to complete. As a token of our appreciation for your participation in the study, we have enclosed a \$5 bill. **If you complete the interview by «date», we will mail you an additional \$«IncAmt» check.**

You may access the B&B interview by logging on to our secure website at <https://surveys.nces.ed.gov/bb/> using the Study ID and password provided below. ***The password is case sensitive; you will need to enter it exactly as it appears here.***

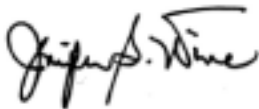
Study ID = «caseid»
Password = «password»

Enclosed you will find a brochure that provides a brief description of B&B, findings from the 2001 study, and our strict confidentiality procedures. Federal law requires that we protect your privacy. Your responses will be secured behind firewalls and will be encrypted during internet transmission. Your responses will be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose, except as required by law. If you have questions, problems completing your interview online, or prefer to complete the interview over the telephone, simply call the **B&B Help Desk toll-free at 1-877-262-4440**. Your participation, while voluntary, is critical to the study's success.

If you have any other questions or concerns about the study, please contact the B&B Project Director, Dr. Jennifer Wine, toll-free at 1-866-662-8227, jennifer@rti.org, or the NCES Project Officer, Mr. Ted Socha, at 1-202-502-7383, ted.socha@ed.gov.

Thank you in advance for making B&B a success.

Sincerely,



Jennifer S. Wine, Ph.D.
B&B Project Director
Education Studies Division
RTI International



Ted Socha
NCES Project Officer
National Center for Education Statistics
U.S. Department of Education

Enclosure

RTI USE ONLY: «panelinfo»

The National Center for Education Statistics (NCES) of the U.S. Department of Education is authorized by federal law (Public Law 107-279) to conduct the Baccalaureate and Beyond Longitudinal Study. NCES will authorize only a limited number of researchers to have access to information that could be used to identify individuals. They may use the data for statistical purposes only and are subject to fines and imprisonment for misuse.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number of this information collection is 1850-0729, and it is completely voluntary. The time required to complete this information collection is estimated to average 25 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate or suggestions for improving the interview, please write to: U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20006. If you have comments or concerns regarding the status of your individual interview, write directly to: Mr. Ted Socha, National Center for Education Statistics, 1990 K Street, NW, Washington, DC 20006.

Estimado(a) «fname»,

Actualmente se están realizando las entrevistas para el Estudio Longitudinal de Bachillerato y Estudios Posteriores (B&B). La entrevista tomará alrededor de 25 minutos en completarse. Como muestra de nuestro agradecimiento por su participación en el estudio, adjuntamos a la presente un billete de \$5 dólares. **Si usted completa la entrevista a más tardar el «date», nosotros le enviaremos por correo un cheque adicional por \$«IncAmt» dólares.**

Usted puede tener acceso a la entrevista del estudio B&B al entrar en nuestro sitio de Internet seguro <https://surveys.nces.ed.gov/bb/> al usar el número de identificación del estudio y la contraseña que se muestra a continuación. **La contraseña distingue letras mayúsculas y minúsculas, de manera que necesitará escribirla exactamente como aparece aquí.**

Número de identificación del estudio = «caseid»

Contraseña = «password»

Adjuntamos a la presente un folleto que contiene una breve descripción del estudio B&B, así como los hallazgos del estudio del año 2001 y nuestros procedimientos estrictos de confidencialidad. La ley federal requiere que nosotros protejamos su privacidad. Sus respuestas serán protegidas con un sistema de seguridad (“firewall”) y serán codificadas al momento de ser transmitidas a través del Internet. Sus respuestas se usarán sólo con propósitos estadísticos y no serán divulgadas o utilizadas en ninguna forma que lo/la identifique para ningún otro propósito, excepto cuando sea requerido por la ley. Si usted tiene preguntas o problemas para completar su entrevista en Internet, o si prefiere completar la entrevista por teléfono, simplemente llame **gratis** a la **Oficina de ayuda del estudio B&B, al 1-877-262-4440**. Su participación, aunque voluntaria, es esencial para el éxito del estudio.

Si usted tiene alguna otra pregunta o preocupación acerca del estudio, por favor, comuníquese con la Directora del proyecto B&B, la Dra. Jennifer Wine, al número de teléfono gratuito 1-866-662-8227, o también puede enviarle un correo electrónico a: jennifer@rti.org. También puede comunicarse con el Funcionario del proyecto en el Centro Nacional de Estadísticas sobre la Educación (NCES), el Sr. Ted Socha, al 1-202-502-7383, o a través de su correo electrónico: ted.socha@ed.gov.

Le agradecemos de antemano por hacer que el Estudio Longitudinal de Bachillerato y Estudios Posteriores (B&B) sea todo un éxito.

El Centro Nacional de Estadísticas sobre la Educación (NCES) del Departamento de Educación de los Estados Unidos está autorizado por ley federal (Ley Pública 107-279) para realizar el Estudio Longitudinal de Bachillerato y Estudios Posteriores (B&B). El NCES autorizará solamente a un número limitado de estudiosos a tener acceso a información que pudiera ser utilizada para identificar a las personas. Los estudiosos pueden utilizar los datos solamente para propósitos estadísticos y están sujetos a multas y encarcelamiento en caso de mala utilización.

De acuerdo a la Ley de Reducción de Trabajo Administrativo de 1995, ninguna persona tiene la obligación de responder a un cuestionario que solicite información, a menos que lleve un número de control de OMB (Oficina de Administración y Presupuesto) válido. El número válido de control otorgado por el OMB para esta recopilación de datos es el 1850-0631 y esta recopilación de datos es completamente voluntaria. Se calcula que el tiempo promedio para contestar cada cuestionario es de 25 minutos, incluyendo el tiempo para revisar las instrucciones, buscar la información, juntar los datos necesarios, completar y revisar la información recopilada. Si tiene algún comentario acerca de la exactitud del tiempo estimado o sugerencias para mejorar la entrevista, favor de escribir a: U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20006. Si tiene comentarios o dudas con respecto a su entrevista particular, favor de escribir directamente a: Mr. Ted Socha, National Center for Education Statistics, 1990 K Street, NW, Washington, DC 20006.

Data Collection Announcement Letter to Parents

(Date)

«Cpfname» «Cpmname» «Cplname» «Cpsuffix»
«CAddr1»
«CAddr2»
«CCity», «CState» «CZip»

Study ID: «caseid»

Dear «Cpfname»,

«fname» «lname» has been selected to participate in the Baccalaureate and Beyond Longitudinal Study (B&B), which is being conducted by RTI International for the National Center for Education Statistics (NCES) in the U.S. Department of Education's Institute of Education Sciences. You can help make this study a success by encouraging «fname» to complete the B&B interview by «date». **If the interview is completed by «date», «fname» will receive «IncAmt» as a token of our appreciation.**

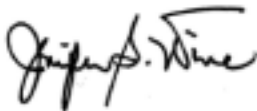
Data collected during B&B will help educators, researchers, and policymakers better understand how earning a bachelor's degree affects the lives of students and their transitions to the workforce and graduate school. The interview covers topics such as «fname»'s experience in the workforce; «pronoun» earnings and expenses; «pronoun» participation in civic activities; and «pronoun» personal, professional, and educational goals.

Enclosed you will find a brochure that provides an overview of B&B findings from the 2001 study and our strict confidentiality procedures. «fname»'s participation in this study, while voluntary, is critical to the study's success.

If you have any questions or concerns about the study, please contact the B&B Project Director, Dr. Jennifer Wine, toll-free at 1-866-662-8227, jennifer@rti.org, or the NCES Project Officer, Mr. Ted Socha, at 1-202-502-7383, ted.socha@ed.gov.

We sincerely appreciate your assistance and thank you in advance for helping us conduct this important study.

Sincerely,



Jennifer S. Wine, Ph.D.
B&B Project Director
Education Studies Division
RTI International



Ted Socha
NCES Project Officer
National Center for Education Statistics
U.S. Department of Education

Enclosure

RTI USE ONLY: «panelinfo»

The National Center for Education Statistics (NCES) of the U.S. Department of Education is authorized by federal law (Public Law 107-279) to conduct the Baccalaureate and Beyond Longitudinal Study (B&B). NCES will authorize only a limited number of researchers to have access to information that could be used to identify individuals. They may use the data for statistical purposes only and are subject to fines and imprisonment for misuse.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number of this information collection is 1850-0729, and it is completely voluntary. The time required to complete this information collection is estimated to average 25 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate or suggestions for improving the interview, please write to: U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20006. If you have comments or concerns regarding the status of your individual interview, write directly to Mr. Ted Socha, National Center for Education Statistics, 1990 K Street NW, Washington, DC 20006.

«span_fill» «Cpfname»,

«fname» «lname» ha sido «span_fill1» para participar en el Estudio Longitudinal de Bachillerato y Estudios Posteriores (B&B), el cual está realizando RTI International para el Centro Nacional de Estadísticas sobre la Educación (NCES) del Instituto de Ciencias de la Educación del Departamento de Educación de los Estados Unidos. Usted nos puede ayudar a que el estudio sea un éxito al animar a «fname» a completar la entrevista del estudio B&B a más tardar el «date». **Si la entrevista se completa a más tardar el «date», «fname» recibirá la cantidad de «IncAmt» dólares como muestra de nuestro agradecimiento.**

Los datos obtenidos durante el estudio B&B ayudarán a los educadores, así como a las personas que realizan estudios y a los encargados de crear políticas a entender mejor de qué manera el obtener un título de bachillerato afecta la vida de los estudiantes y la transición que pasan hacia el campo laboral y a los estudios de post grado. La entrevista trata de temas como las experiencias de «fname» en el campo laboral; ganancias y gastos; participación en actividades cívicas; así como metas personales, profesionales y educativas.

Adjuntamos a la presente un folleto que proporciona un descripción general de los hallazgos del estudio B&B en el año 2001 así como nuestros procedimientos estrictos de confidencialidad. La participación de «fname» en este estudio, aunque voluntaria, es esencial para el éxito del estudio.

Si tiene alguna pregunta o preocupación acerca del estudio, favor de comunicarse con la Directora del proyecto B&B, la Dra. Jennifer Wine, al número de teléfono gratuito 1-866-662-8227, o también puede enviarle un correo electrónico a: jennifer@rti.org. También puede comunicarse con el Funcionario del proyecto en el Centro Nacional de Estadísticas sobre la Educación (NCES), el Sr. Ted Socha, al 1-202-502-7383, o a través de su correo electrónico: ted.socha@ed.gov.

Apreciamos sinceramente su ayuda y le damos las gracias de antemano por ayudarnos en realizar este importante estudio.

El Centro Nacional de Estadísticas sobre la Educación (NCES) del Departamento de Educación de los Estados Unidos está autorizado por ley federal (Ley Pública 107-279) para realizar el Estudio Longitudinal de Bachillerato y Estudios Posteriores (B&B). El NCES autorizará solamente a un número limitado de estudiosos a tener acceso a información que pudiera ser utilizada para identificar a las personas. Los estudiosos pueden utilizar los datos solamente para propósitos estadísticos y están sujetos a multas y encarcelamiento en caso de mala utilización.

De acuerdo a la Ley de Reducción de Trabajo Administrativo de 1995, ninguna persona tiene la obligación de responder a un cuestionario que solicite información, a menos que lleve un número de control de OMB (Oficina de Administración y Presupuesto) válido. El número válido de control otorgado por el OMB para esta recopilación de datos es el 1850-0729 y esta recopilación de datos es completamente voluntaria. Se calcula que el tiempo promedio para contestar cada cuestionario es de 25 minutos, incluyendo el tiempo para revisar las instrucciones, buscar la información, juntar los datos necesarios, completar y revisar la información recopilada. Si tiene algún comentario acerca de la exactitud del tiempo estimado o sugerencias para mejorar la entrevista, favor de escribir a: U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20006. Si tiene comentarios o dudas con respecto a su entrevista particular, favor de escribir directamente a: Mr. Ted Socha, National Center for Education Statistics, 1990 K Street, NW, Washington, DC 20006.

Thank You/Reminder Postcard



BACCALAUREATE
AND BEYOND
LONGITUDINAL
STUDY

PO Box 12194
Research Triangle Park, NC 27709-2194
RTI Project #0209777.600.336

ADDRESS SERVICE REQUESTED

«stu_name»
«addr1»
«addr2»
«citystzip»

12345678/



BACCALAUREATE
AND BEYOND
LONGITUDINAL
STUDY

Recently, we sent you information about participating in the Baccalaureate and Beyond Longitudinal Study (B&B) and completing the interview. If you have already completed the interview, we would like to thank you. Your assistance is very much appreciated.

If you have not yet completed the interview, we would like to remind you that **if you complete the interview by «date», you will receive \$«IncAmt»** as a token of our appreciation.

To complete the online interview over our secure website, log on to <https://surveys.nces.ed.gov/bb/>.

If you have any questions or problems while completing the online interview or would like to complete the interview over the telephone with a professionally trained interviewer, please contact the B&B Help Desk toll-free at 1-877-262-4440.

RTI International is conducting this study for the National Center for Education Statistics (NCES) in the U.S. Department of Education's Institute of Education Sciences.

Thank you.

Reminder Folded Postcard - September

Baccalaureate and Beyond Longitudinal Study

«fname»», your participation is critical to the success of B&B!

Log on to our secure website to complete the online interview at

<https://surveys.nces.ed.gov/bb/>

Study ID: «caseid»

Password: «password»n

or call

1-877-262-4440

On average, the interview takes about 25 minutes to complete.

Thank you in advance for making B&B a success.

Baccalaureate and Beyond Longitudinal Study (B&B) is a survey about the education and employment experiences of students in the year after earning a bachelor's degree. IES International is conducting this study for the National Center for Education Statistics (NCES) in the U.S. Department of Education's Institute of Education Sciences. For questions regarding the survey, please call the B&B Help Desk at 1-877-262-4440, or you can e-mail us at bbhelp@ies.ed.gov.

ies NATIONAL CENTER FOR EDUCATION SERVICES
INSTITUTE OF EDUCATION SCIENCES

Reminder Flyer - October



Baccalaureate and Beyond Longitudinal Study

«fname», interviews for the Baccalaureate and Beyond Longitudinal Study (B&B) are being conducted. B&B wants to know what you've been doing since earning your bachelor's degree.

The survey takes only about 25 minutes, and when complete, we will send you a \$«inc_amt» check as a token of our appreciation.



Log on and share your experiences since college!

<https://surveys.nces.ed.gov/bb/>

Study ID: «caseid»
Password: «password»n

Or call 1-877-262-4440 to complete the interview by phone.

 **ies** NATIONAL CENTER FOR EDUCATION STATISTICS
INSTITUTE OF EDUCATION SCIENCES

Baccalaureate and Beyond Longitudinal Study (B&B) is a survey about the education and employment experiences of students in the year after earning a bachelor's degree. IES International is conducting this study for the National Center for Education Statistics (NCES) in the U.S. Department of Education's Institute of Education Sciences. For questions regarding the survey, please call the B&B Help Desk at 1-877-262-4440, or you can e-mail us at bbmail@nces.gov.

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Spanish Interview Notification Letter

(Date)

«fname» «mname» «lname»
«addr1»
«addr2»
«city», «state» «zip»

Study ID: «caseid»

Dear «fname»,

As we continue data collection for the Baccalaureate and Beyond Longitudinal Study (B&B), we want to ensure that all selected students from the 2007–08 school year, including students who speak primarily Spanish, are well represented in the study. In order to accomplish this goal, we have created a Spanish version of the interview which takes about 10 minutes to complete.

To complete the Spanish interview online, log on to our secure website at <https://surveys.nces.ed.gov/bb/> using the Study ID and password provided below. To complete the interview by telephone with a professional interviewer, please call the **B&B Help Desk at 1-877-262-4440**.

Study ID = «caseid»
Password = «password»s

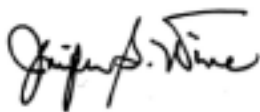
The password is case sensitive; you will need to enter it exactly as it appears here.
When the interview window opens, click the button labeled "Para español, presione aquí," then click the button labeled "Comienzo."

If you complete the B&B interview, you will receive a \$«IncAmt» check as a token of our appreciation.

B&B is conducted by RTI International for the National Center for Education Statistics (NCES) in the U.S. Department of Education's Institute of Education Sciences. Participation in this study is voluntary and will not affect any aid or any benefits you receive. Your responses will be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose, except as required by law. If you have any questions about the study, you can visit the B&B website, or you can e-mail us at bbemail@rti.org. If you have any questions about your rights as a study participant, you can call RTI's Office of Research Protection toll-free at 1-866-214-2043.

Thank you in advance for making B&B a success.

Sincerely,



Jennifer S. Wine, Ph.D.
B&B Project Director
Education Studies Division
RTI International



Ted Socha
NCES Project Officer
National Center for Education Statistics
U.S. Department of Education

29 de octubre de 2009

RTI USE ONLY: «panelinfo»

«fname» «mname» «lname»
«addr1»
«addr2»
«city», «state» «zip»

Número de identificación del estudio: «caseid»

Estimado(a) «fname»,

A medida que continuamos con la recopilación de datos para el Estudio Longitudinal de Bachillerato y Estudios Posteriores (B&B, por sus siglas en inglés), queremos asegurarnos que todos los estudiantes seleccionados del año académico 2007-08, incluyendo los estudiantes que principalmente hablan español, estén bien representados en el estudio. Con el fin de lograr este objetivo, hemos creado una versión de la entrevista en español, la cual toma más o menos 10 minutos en completarse.

Para completar la entrevista en español en Internet, entre en nuestro sitio web seguro en <https://surveys.nces.ed.gov/bb/> y use el número de identificación del estudio y la contraseña que se proporcionan a continuación. Para completar la entrevista por teléfono con un(a) entrevistador(a) profesional, por favor, llame gratis a la **Oficina de ayuda del estudio B&B al 1-877-262-4440**.

Número de identificación del estudio = «caseid»

Contraseña = «password»s

La contraseña distingue letras mayúsculas y minúsculas; usted necesitará escribirla exactamente como se muestra aquí.

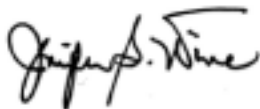
Cuando la pantalla de la entrevista se abra, presione el botón que dice “Para español, presione aquí” y luego presione el botón que dice “Comienzo”.

Si completa la entrevista B&B, usted recibirá un cheque por \$«IncAmt» dólares como muestra de nuestro agradecimiento.

El estudio B&B lo realiza RTI Internacional para el Centro Nacional de Estadísticas sobre la Educación (NCES) en el Instituto de Ciencias de la Educación del Departamento de Educación de los Estados Unidos. La participación en este estudio es voluntaria y no afectará ninguna ayuda o ningún beneficio que usted reciba. Sus respuestas se usarán sólo con propósitos estadísticos y no serán divulgadas o utilizadas en ninguna forma que se le pueda identificar para cualquier otro propósito, excepto cuando lo requiera la ley. Si tiene alguna pregunta acerca del estudio, puede visitar el sitio web del estudio B&B o nos puede enviar un mensaje por correo electrónico a bbemail@rti.org. Si tiene alguna pregunta acerca de sus derechos como participante en el estudio, puede llamar a la Oficina de RTI para la Protección de Participantes en Estudios al 1-866-214-2043 (número gratuito).

Gracias de antemano por hacer del estudio B&B todo un éxito.

Atentamente,



Dra. Jennifer S. Wine
Directora del proyecto B&B
División de Estudios de la Educación
RTI International



Ted Socha
Funcionario del proyecto en NCES
Centro Nacional de Estadísticas sobre la Educación
Departamento de Educación de los Estados Unidos

PARA USO DE RTI SOLAMENTE: «panelinfo»

Letter to Parents – November

(Date)

«Cpfname» «Cpmname» «Cplname» «Cpsuffix»
«CAddr1»
«CAddr2»
«CCity», «CState» «CZip»

Study ID: «caseid»

Dear «Cpfname»,

You may be wondering why we've been trying to contact you regarding «fname» «lname»'s participation in the U.S. Department of Education's Baccalaureate and Beyond Longitudinal Study (B&B). B&B will help researchers and policymakers better understand how earning a bachelor's degree <<in Major>> can affect new graduates as they transition into the next phases of their lives.

Last year, «fname» participated in the 2007-2008 National Postsecondary Student Aid Study (NPSAS) and agreed to participate in the B&B follow-up study in 2009. We are writing you because you were listed as someone who could help us contact <fname>.

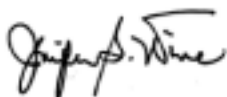
Due to the strict statistical procedures required, the study's success depends on the participation of its selected sample members. Participation is so important that <fname> will receive **«IncAmt» as a token of our appreciation** for completing the 25-minute interview. There are two important ways you can help ensure the success of the study.

1. Providing updated contact information for «fname» by calling us toll-free at 1-877-262-4440 or by visiting our website at <https://surveys.nces.ed.gov/bb/> and clicking on "Provide Address Update." You will need to provide the Study ID number <<Study ID>>.
2. Encouraging «fname» to complete the B&B interview by calling one of our professionally trained telephone interviewers at 1-877-262-4440. Or, <Fname> can obtain the login information needed to complete the online interview by calling the B&B Help Desk toll-free at 1-877-262-4440 or e-mailing us at bbemail@rti.org.

Included is a brochure that provides the answers to the most frequently asked questions. If you have additional questions about B&B, please contact the B&B Project Director, Dr. Jennifer Wine, toll-free at 1-866-662-8227, jennifer@rti.org, or the NCES Project Officer, Ted Socha, at 1-202-502-7383, ted.socha@ed.gov. Publications and additional information about past B&B studies can be found at <http://nces.ed.gov/surveys/b&b/>.

We greatly appreciate your support of this important research.

Sincerely,



Jennifer S. Wine, Ph.D.
B&B Project Director
Education Studies Division
RTI International



Ted Socha
NCES Project Officer
National Center for Education Statistics
U.S. Department of Education

Holiday Greeting Card




www.ed.gov



ies.ed.gov

nces.ed.gov

Greeting Card Password Insert



**<<fname>>, don't forget ...
complete your B&B interview today!**


<https://surveys.nces.ed.gov/bb/>

Study ID: <<caseid>>

Password: <<password>>n

**When you complete the survey, we will send you
a \$<<inc_amt>> check as a token of our
appreciation.**

**Call 1-877-262-4440 for help with the web
survey or to complete the survey by phone.**



**Baccalaureate and
Beyond Longitudinal
Study**

Meet ED Folded Postcard

Baccalaureate and Beyond Longitudinal Study



**«fname»
the B&B survey is coming
to an end.
Please help us make this
study a success.**

**And check out our YouTube video, where Ed will tell you more about
the survey and why we still need you.**

«video»

The survey only takes about «int_time» to complete.

**When you complete the survey, we will give you \$«inc_amt» to thank you for
your participation.**

Please log on to our secure website at <https://surveys.nces.ed.gov/bb/>

Study ID: «caseid»
Password: «password»4

**Or you can call 1-877-262-4440 to complete
the survey by telephone.**

THANK YOU.



Baccalaureate and Beyond Longitudinal Study (B&B) is a survey about the education and employment experiences of students in the year after earning a bachelor's degree. IES International is conducting this study for the National Center for Education Statistics (NCES) in the U.S. Department of Education's Institute of Education Sciences. For questions regarding the survey, please call the B&B Help Desk at 1-877-262-4440, or you can e-mail us at bbmail@ies.org.



End of Data Collection Flyer

Baccalaureate and Beyond Longitudinal Study

IT'S FAST... ONLY 10 MINUTES!



«(fname)», our data collection ends **March 12th** and we still **NEED YOU**.

Please help us by completing this **10-minute B&B** interview and we'll send you **\$«(INC_AMT)»** as a token of our appreciation.

GO TO:

<https://surveys.nces.ed.gov/bb/>

Study ID: «(caseid)»

Password: «(password)»6

Or call 1-877-262-4440 to complete the interview by phone.

THANK YOU FOR PARTICIPATING.

The Baccalaureate and Beyond Longitudinal Study (B&B) is a survey about the education and employment experiences of students in the year after earning a bachelor's degree. IES International is conducting this study for the National Center for Education Statistics (NCEES) in the U.S. Department of Education's Institute of Education Sciences. For questions regarding the survey, please call the B&B Help Desk at 1-877-262-4440, or you can e-mail us at bbhelp@ies.ed.gov.

spw12/10



Thank You Letter

(Date)

«fname» «mname» «lname» «suffix»
«addr1»
«addr2»
«city», «state» «zip» «zip4»

Study ID: «caseid»

Dear «fname» «lname»:

Thank you for completing your first interview for the Baccalaureate and Beyond Longitudinal Study (B&B)!

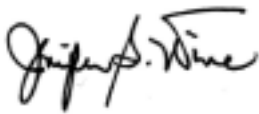
The National Center for Education Statistics (NCES) in the U.S. Department of Education's Institute of Education Sciences and the staff of B&B thank you for your participation.

Enclosed you will find a check for \$«IncAmt» as a token of our appreciation.

Your participation in B&B is very important in helping to ensure the success of the study. We look forward to your next interview in 2012.

If you have any questions, please do not hesitate to contact us toll-free at 1-866-662-8227.

Sincerely,



Jennifer S. Wine, Ph.D.
B&B Project Director
Education Studies Division
RTI International



Ted Socha
NCES Project Officer
National Center for Education Statistics
U.S. Department of Education

Enclosure

«panelinfo»

Generic Lead Letter

Study ID: _____

Dear _____,

Last year, you participated in the National Postsecondary Student Aid Study (NPSAS) for the National Center for Education Statistics (NCES) in the U.S. Department of Education's Institute of Education Sciences. NPSAS answered a lot of questions about how students pay for college. We are now asking for your help again. We are contacting you to ask some follow-up questions as part of the Baccalaureate and Beyond Longitudinal Study (B&B). Data collected from B&B will help educators, researchers, and policymakers better understand how earning a bachelor's degree affects students' lives and choices about further education and work.

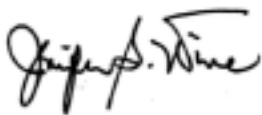
Enclosed you will find a brochure that provides a brief description of B&B, findings from the 2001 study, and our strict confidentiality procedures. Federal law requires that we protect your privacy. Your participation in the B&B is critical to the success of the study. We would like you to complete a 20-minute interview with our field interviewer; the interview can be arranged at a time convenient for you. All of your responses will be kept confidential and will be protected to the fullest extent allowable under law. When you complete your interview, **we will pay you _____** as a token of our appreciation.

Thank you for helping to make B&B a success. If you would like to schedule an appointment to complete the interview, please call our field interviewer, _____, at _____ (call collect, if long distance), or you may call his/her supervisor toll-free at _____. Please do not hesitate to call me toll-free at 1-866-662-8227 or to e-mail me at jennifer@rti.org if I can provide any additional information about the study.

B&B is conducted by RTI international for the National Center for Education Statistics (NCES) in the U.S. Department of Education's Institute of Education Sciences.

Thank you for your time and willingness to participate.

Sincerely yours,



Jennifer Wine, Ph.D.
B&B Project Director

Identificación del estudio: _____

Estimado(a) _____,

El año pasado usted participó en el Estudio Nacional sobre Asistencia Económica para Estudiantes en Escuelas Postsecundarias (NPSAS) para el Centro Nacional de Estadísticas sobre la Educación (NCES), del Instituto de Ciencias de la Educación del Departamento de Educación de los Estados Unidos. El estudio NPSAS respondió muchas preguntas sobre cómo los estudiantes pagan la universidad. Ahora le estamos pidiendo su ayuda una vez más. Nos estamos comunicando con usted para hacer unas preguntas de seguimiento como parte del Estudio Longitudinal de Bachillerato y Estudios Posteriores (B&B). Los datos recopilados por el estudio B&B ayudarán a los educadores, a las personas encargadas de realizar estudios y a los legisladores, a entender mejor cómo el obtener un título de bachillerato afecta las vidas de los estudiantes y sus opciones sobre educación posterior y empleo.

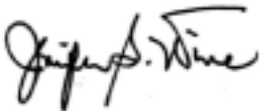
Adjuntamos a la presente un folleto que proporciona una breve descripción del estudio B&B, así como los hallazgos del estudio en el año 2001 y nuestros procedimientos estrictos de confidencialidad. La ley federal requiere que nosotros protejamos su privacidad. Su participación en el estudio B&B es esencial para el éxito del estudio. Nos gustaría que completara una entrevista de 20 minutos de duración con nuestro(a) entrevistador(a). La entrevista puede fijarse para un día y hora que sean convenientes para usted. Todas sus respuestas se mantendrán en forma confidencial y se protegerán hasta donde lo permita la ley. Una vez que usted haya completado la entrevista, **le pagaremos** _____ dólares como muestra de nuestro agradecimiento.

Gracias por ayudar a lograr el éxito del estudio B&B. Si usted desea hacer una cita para completar la entrevista, por favor, llame a nuestro(a) entrevistador(a) _____, al _____ (puede llamar por cobrar si la llamada es de larga distancia) o puede llamar al supervisor al número de teléfono gratuito _____. Si necesita mayor información que yo pueda proporcionarle acerca del estudio, por favor, no dude en llamarme al número de teléfono gratuito 1-866-662-8227 o enviarme un mensaje de correo electrónico a jennifer@rti.org.

El estudio B&B lo realiza RTI International para el Centro Nacional de Estadísticas sobre la Educación (NCES) del Instituto de Ciencias de la Educación del Departamento de Educación de los Estados Unidos.

Gracias por su tiempo y por estar dispuesto(a) a participar en el estudio.

Atentamente,



Dra. Jennifer Wine
Directora del proyecto B&B

Field Interviewer Authorization Letter

(Date)

To Whom It May Concern:

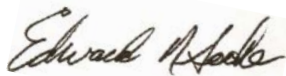
This letter is to verify that «FI_Name» is representing RTI International (RTI) during data collection for a national research study conducted for the National Center for Education Statistics of the U.S. Department of Education.

This individual is a Field Data Collector for the Baccalaureate and Beyond Longitudinal Study (B&B) (Contract No. ED-05-CO-0033) which will help educators, researchers, and policymakers better understand how earning a bachelor's degree affects students' lives and choices about further education and work. Your assistance in helping this person locate, contact, and interview sample members for this important study would be greatly appreciated.

If you would like to verify the employment status of this individual, please contact Jeff Franklin, the B&B Data Collection Task Leader, at 1-800-334-8571, ext. 2614, weekdays between 8:15 AM and 5:00 PM ET. If you have any questions about the study, you may reach me at 1-202-502-7383 (M-F).

Thank you for your cooperation.

Sincerely,



Ted Socha
NCES Project Officer
U.S. Department of Education
National Center for Education Statistics

Appendix G

Training Agendas for Transcript Data Collection

Institution Contactor Training Agenda	G-3
Keying and Coding Training Agenda.....	G-4
Keyer-Coder Training on Coding Updates Training Agenda	G-10

Postsecondary Education Transcript Study (PETS:09) Transcript and Course Catalog Data Collection

Institution Contactor Training Agenda

9:00 – 9:05	Introductions <ul style="list-style-type: none">▪ Project Team▪ IC Team
9:05– 9:15	History of Dept of Ed/NCES Studies <ul style="list-style-type: none">▪ Overview of B&B (and NPSAS)▪ Overview of BPS▪ Overview of Transcripts
9:15 – 10:15	Institution Contacting Responsibilities Review <ul style="list-style-type: none">▪ Communication Plan▪ Confidentiality Laws▪ Catalog Collection▪ Schedules/Appointments▪ Gaining Cooperation/Avoiding Refusals▪ Transcript Collection & Reimbursement
10:15– 10:30	-BREAK-
10:30 – 11:30	Mailout Materials and Overview of Contacts <ul style="list-style-type: none">▪ Transcript Request Mailout▪ Transcript/Catalog Prompting
11:30 – 12:00	Understanding the Transcript and Catalog Data Collection <ul style="list-style-type: none">▪ FAQs
12:00 – 1:00	-LUNCH-
1:00 –1:15	Prompting for Catalogs <ul style="list-style-type: none">▪ Number collected to date▪ Modes of submission: e-mail, FedEx, tell us where on website
1:15 –2:15	Institution Contacting System (ICS) Review <ul style="list-style-type: none">▪ Contacts screen▪ Stages, Tasks, Comments▪ Creating/sending a problem sheet▪ Reports
2:15 –3:15	PETS Website <ul style="list-style-type: none">▪ Home page and menu bar▪ Transcript Main Menu
3:15–3:30	-BREAK-
3:30 – 4:00	Review Script, Appendix A, Setting Statuses
4:00 – 4:30	Review/Oral Quiz of FAQs

Keying and Coding Training Agenda

Training Objective

Prepare trainees for keying and coding PETS transcripts with a minimum of 95% accuracy.

Day 1 - Overview

- *Provide overview of project and training*
- *Identify transcript elements*
- *Use school catalogs to locate course information*

Day 2 – Getting Started: The Big Picture

- *Relate transcript data to coding schema*
- *Introduce the application*

Day 3 – Drilling Down: Keying & Coding

- *Integrate keying and coding skills working in the application*
- *Demonstrate coding accuracy*

Day 4 – Continuous Improvement: Getting it Right

- *Practice keying and coding*
- *Use transcripts, course catalogs, PETS codes*

Day 5 – Practice and Practicum

- *Practice keying and coding*
- *Demonstrate keying and coding skills during Practicum*
- *Achieve a 95% success rate for all trainees*

Day 1 - Overview

- *Provide overview of project and training*
- *Identify transcript elements*
- *Use school catalogs to locate course information*

10:00-11:00 PROJECT OVERVIEW

10:00-10:20 **Welcome/Introductions**

10:20-10:40 **Project Overview**

10:40-11:00 **Training Overview**

11:00-12:00 TRANSCRIPT OVERVIEW

11:00-12:00 **Understanding Transcripts**

12:00-1:00 -LUNCH-

1:00-4:45 TRANSCRIPTS AND CATALOGS

1:00-2:30 **Practice with Transcripts**

2:30-2:45 -BREAK-

2:45-4:30 **Searching in Catalogs**

4:30-5:00 **Wrap-Up**

Day 2 – Getting Started: The Big Picture

- *Relate transcript data to coding schema*
- *Introduce the application*

9:00-12:00 CODING INTRODUCTION

9:00-9:30 **Recap**

9:30-10:30 **Introduction to 2-digit Schema**

10:30-10:45 -BREAK-

10:45-12:00 **Introducing the Application**

12:00 – 1:00 -LUNCH-

1:00-4:45 KEYING OVERVIEW

1:00-2:30 **Application Demo**

2:30-2:45 -BREAK-

2:45-4:00 **Application Demo**

4:00-4:45 **A Day in the Life of a Keyer/Coder**

4:45-5:00 **Wrap-Up**

Day 3 – Drilling Down: Keying & Coding

- *Integrate keying and coding skills working in the application*
- *Demonstrate coding accuracy*

9:00-12:00 CODING SPECIFICS

9:00-9:30 **Recap**

9:30-10:30 **4-Digit Families**

10:30-10:45 -BREAK-

10:45-12:00 **4-Digit Families**

12:00 – 1:00 -LUNCH-

1:00-4:45 DEVELOPING/REFINING CODING SKILLS

1:00-1:30 **Overview to 6-digit codes**

1:30-3:00 **Working with 6-digit codes**

3:00-3:15 -BREAK-

3:15-4:45 **Working with 6-digit codes**

4:45-5:00 **Wrap-Up**

Day 4 – Continuous Improvement: Getting it Right

- *Practice keying and coding*
- *Use transcripts, course catalogs, PETS codes*

9:00-12:00 PRACTICE

9:00-9:30 Q/A

9:30-12:00 **Round Robin #1**

12:00 – 1:00 -LUNCH-

1:00-5:00 MORE PRACTICE

1:00-5:00 **Round Robin #2**

3:00-3:15 -BREAK-

Day 5 – Practice and Practicum

- *Practice keying and coding*
- *Demonstrate keying and coding skills during Practicum*
- *Achieve a 95% success rate for all trainees*

9:00-10:15 REVIEW AND PRACTICE

9:00-10:15 **Practice**

10:15-10:30 Break

10:30-12:00 PRACTICUM PART I

10:30-12:00 **Practicum Part I: Keying**

12:00 – 1:00 -LUNCH-

1:00-5:00 PRACTICUM PART II

1:00-3:00 **Practicum Part II: Coding**

3:00-5:00 **Verification of 95% accuracy**

Keyer-Coder Training on Coding Updates Training Agenda

Training Objective

Acquaint PETS project staff with the new 2010 CIP Taxonomy.

Day 1 – Overview for CCS staff

- *Introduce PETS study*
- *Introduce relevant materials – transcripts, application, catalogs, codes.*
- *Introduce the CIP categories and structure*

Day 2 – Getting Started: Transcripts & Coding

- *Relate transcripts & catalogs to coding process*
- *Practice coding*
- *Review administrative responsibilities*

Day 3 – Continuous Improvement: Getting it Right

- *Review administrative responsibilities*
- *Practice coding with worksheet examples*
- *Practice coding in the application*

Day 1 - Overview

- *Introduce B&B study*
- *Introduce relevant materials – transcripts, application, catalogs, codes.*
- *Introduce the CIP categories and structure*

9:00-9:30 PROJECT OVERVIEW

9:00-9:45 **Call Center Overview
Project Goals/Overview**

9:45-12:00 TRANSCRIPT OVERVIEW

9:45-10:30 **Understanding Transcripts**

10:30-10:45 -BREAK-

11:00-12:00 **Finding Courses in Catalogs**

12:00-1:00 -LUNCH-

1:00-3:00 CODING OVERVIEW

1:00-3:00 **Introduction to Coding: 2-digit Categories**

3:00-3:15 -BREAK-

3:15-5:00 **Practice with 4-digit Families**

Day 2 – Getting Started: Transcripts & Coding

- *Relate transcripts & catalogs to coding process*
- *Practice coding*
- *Review administrative responsibilities*

9:00-12:00 CODING OVERVIEW

9:00-9:30 **Recap**

9:30-10:30 **Introduction to Major/Course Coding**

10:30-10:45 -BREAK-

10:45-12:00 **Coding Exercises**

12:00 – 1:00 -LUNCH-

1:00-5:00 PROJECT ADMIN RESPONSIBILITIES OVERVIEW

1:00-2:00 **Coding Exercises - continued**

2:00-5:00 **Keying and Coding System – Administrative End**

3:00-3:15 -BREAK-

Day 3 – Continuous Improvement: Getting it Right

- *Review administrative responsibilities*
- *Practice coding with worksheet examples*
- *Practice coding in the application*

9:00-12:00 ADMIN OVERVIEW

9:00-10:00 **Recap**

10:00-10:15 -BREAK-

10:15-12:00 **Working with the System/Practice Exercises**

12:00 – 1:00 -LUNCH-

1:00-5:00 DEVELOPING/REFINING CODING SKILLS

1:00-2:15 **Practice with 6-digit codes**

2:15-2:30 -BREAK-

2:30-5:00 **Working with 6-digit codes**

Appendix H

Notification Material for Transcript Data Collection

National Center for Education Statistics (NCES) Request Letter.....	H-3
Brochure.....	H-4
RTI Request Letter	H-8
American Association of Collegiate Registrars and Admissions Officers (AACRAO) Endorsement Letter	H-9
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Instructions for Sending Data.....	H-11
Catalog Transmittal Sheet.....	H-13
Student Transcript Fax Test Page.....	H-14
Student Transcript Fax Transmittal Sheet.....	H-15
Family Educational Rights and Privacy Act Regulations (FERPA) Excerpt	H-16
Disclosure Notice.....	H-24

National Center for Education Statistics (NCES) Request Letter

<date>

Dear Institutional Research Staff, Registrars and Officials:

«entity_name» has been selected to participate in the 2009 Postsecondary Education Transcript Study (PETS:09). This study is designed to collect transcript data for students participating in two longitudinal studies being conducted for the National Center for Education Statistics (NCES), U.S. Department of Education

- The 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09); and
- The 2004/09 Beginning Postsecondary Students Longitudinal Study (BPS:04/09).

The B&B:08/09 study collects information on recent baccalaureate recipients' education and employment following award of their bachelor's degrees. Students sampled for B&B:08/09 were first selected for participation as part of the 2007-08 National Postsecondary Student Aid Study (NPSAS:08). The BPS:04/09 study collects information on students' postsecondary experiences, work while enrolled, persistence in school, degree completion, and employment following enrollment. Sampled students for the BPS:04/09 study were selected from NPSAS:04.

As part of these studies, NCES is requesting undergraduate transcripts for B&B:08/09 and BPS:04/09 sample members who have attended your institution. As the BPS:04/09 study concludes, there may be additional sample members who report attending your institution; therefore, we may contact you again in about a year. Many secure options are available to you for providing transcript data. These options and instructions are included in this package.

Linking student transcript data, interview data and other administrative record information will result in a dataset that researchers can use to better understand the relationship between students' undergraduate education and their subsequent career paths and graduate/professional study. NCES publications from previous B&B and BPS studies are available at <http://nces.ed.gov/surveys/b&b/> and <http://nces.ed.gov/surveys/bps/>, respectively.

Transcript data will be collected under the provisions of the *Family Educational Rights and Privacy Act* (FERPA) that allow the release of student records to the Secretary of Education or his/her agent without prior written consent from students. The purposes of the study and the manner in which the transcript data will be acquired comply fully with FERPA requirements. We have included in this package the relevant passages of the legislation that authorize the transcript data collection.

Let me assure you that very stringent measures are in place to safeguard the confidentiality of participants (see enclosed "Disclosure Notice").

NCES has contracted with RTI International (RTI) to conduct B&B:08/09 and BPS:04/09. Your cooperation with RTI in these important studies is greatly appreciated. For further information or questions, please contact the RTI project director, Dr. Jennifer Wine, at (919) 541-6870 or jennifer@rti.org. You may also contact NCES Project Officers: Ted Socha at (202) 502-7383 for B&B:08/09 or Dr. Tracy Hunt-White at (202) 502-7438 for BPS:04/09.

Sincerely,

Tom Weko
Associate Commissioner
Postsecondary Studies Division
National Center for Education Statistics

Brochure

**FOR ASSISTANCE WITH PETS,
PLEASE CONTACT:**

**PETS:09 Help Desk
1-877-256-8029 (toll-free)**

If you have questions or concerns about PETS:09, you may contact the following:

RTI International
Tiffany Blattox
PETS:09 Project Coordinator
1-919-485-7791
PETS@rti.org

Dr. Jennifer Wine
Project Director, B&B:08/09 and BPS:04/09
1-919-541-6870
jennifer@rti.org

National Center for Education Statistics
Ted Socha
Project Officer, B&B:08/09
1-202-502-7383
tedsocha@ed.gov

Dr. Tracy Hunt-White
Project Officer, BPS:04/09
1-202-502-7438
tracyhunt.white@ed.gov

RTI International is a trade name of Research Triangle Institute

October 2008



Sponsored by
U.S. Department of Education
National Center for Education Statistics
Washington, DC
<http://nces.ed.gov>

**POSTSECONDARY EDUCATION
PETS
TRANSCRIPT STUDY**



PETS TRANSCRIPT COLLECTION PROCEDURES

All known institutions attended by PETS-eligible students will be contacted for the first time beginning in fall 2008. The PETS:09 website (<https://surveys.nces.ed.gov/PETS/>) will serve as a secure mechanism for the exchange of information between institutions and RTI. To initiate the transcript submission process, institutions are being asked to complete an information page about term systems and grading scales and may be asked to provide course catalogues not available through other public sources. New students may be added to an institution's transcript request list if new enrollment is reported during interviewing in 2009.

Institutions can submit transcripts for their students using any of several methods (in order of preference): uploading to the PETS:09 website, e-mailing the transcripts as an encrypted attachment, sending by secure File Transfer Protocol (sFTP), or faxing to a secure fax machine. Instructions are provided in the packets sent institutions, and the PETS:09 Help Desk will respond to any questions or problems (1-877-256-8029; PETS@rti.org).

Once received, transcripts will be data-entered, and fields of study and courses will be coded using a dictionary developed from the NCES Classification of Instructional Programs (CIP)¹ and the College Course Map (CCM).² Descriptive reports based on the B&B:08/09 and BPS:04/09 data will be released in summer 2011. Other reports and additional information about the studies can be found on their respective websites: <http://nces.ed.gov/surveys/b&b/> and <http://nces.ed.gov/surveys/bps/>.

¹U.S. Department of Education, National Center for Education Statistics, D1123, Classification of Instructional Programs, 2000 Edition (NCES 2002-160), Washington, DC: U.S. Government Printing Office.

²Adelman, C. (1995). *The New College Course Map and Transcript File*. U.S. Department of Education, Washington, DC: National Institute on Postsecondary Education, Libraries, and Lifelong Learning.

NCES POSTSECONDARY LONGITUDINAL STUDIES

As part of its mandate, the National Center for Education Statistics (NCES) in the U.S. Department of Education's Institute of Education Sciences conducts the National Postsecondary Student Aid Study (NPSAS), a cross-sectional study designed to better understand how students and their families pay for postsecondary education and to describe the demographic and other key characteristics of students enrolled at all levels of postsecondary education in a specific academic year. NPSAS serves as the base-year study for two longitudinal follow-up studies:

- the Baccalaureate and Beyond Longitudinal Study (B&B), which collects data on a cohort of students as they complete the bachelor's degree and transition into employment or seek further education; and
- the Beginning Postsecondary Students Longitudinal Study (BPS), which collects data on a cohort of students as they begin their postsecondary education, then follows their educational and employment choices and outcomes over time.

These studies collect data that allow for policy-relevant analysis of students' educational experiences and activities as they enter and persist through college and beyond.

In addition to student interviews and matching to administrative records, the current iterations of these longitudinal studies, B&B:08/09 and BPS:04/09, will collect students' postsecondary transcripts, creating a richer and more complete picture of their educational experiences and outcomes. This combined effort, the 2009 Postsecondary Education Transcript Study (PETS:09), will collect transcripts of approximately 45,000 students at more than 3,000 institutions.

PETS:09 is sponsored by NCES and is being conducted under contract by RTI International, a nonprofit research organization based in North Carolina.

B&B RESEARCH TOPICS	BPS RESEARCH TOPICS
<p>Although similar in design, B&B and BPS examine postsecondary persistence, progress, and degree attainment from distinct perspectives.</p> <p>2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09)</p> <p>The B&B:08 cohort consists of students who completed requirements for the bachelor's degree during the 2007-08 academic year. In addition to the base-year interviews conducted in 2008, eligible sample members will be interviewed again in 2009 and in 2012. Research topics to be explored using the B&B data include the following:</p> <ul style="list-style-type: none">• the relationship between college graduates' coursetaking while in college and their subsequent paths through graduate school or into the labor market;• the educational debt burden of college graduates; and• the pool of baccalaureate degree recipients who have prepared for and entered into elementary and secondary school teaching. <p>Since B&B:08/09 focuses on bachelor's degrees completed during the 2007-08 academic year, B&B transcript collection will target all academic years leading up to the bachelor's degree, including transfer credit from institutions other than that which awarded the respondent's degree.</p>	<p>2004/09 Beginning Postsecondary Students Longitudinal Study (BPS:04/09)</p> <p>The BPS:04 cohort consists of students who began postsecondary education for the first time during the 2003-04 academic year. BPS follows students who first enrolled in every type of postsecondary institution, including vocational schools, community/junior colleges, and 4-year colleges and universities. This study follows the cohort members regardless of whether or not they completed a postsecondary degree or certificate program. Research topics to be explored using the BPS data include the following:</p> <ul style="list-style-type: none">• annual rates of retention and degree or certificate completion at the first institution attended;• student transfer rates, including when and where students transfer, and degree completion following transfer; and• differences in retention, transfer, and completion rates by type of institution, program, attendance status, and student characteristics. <p>Because students in the BPS:04 cohort began their postsecondary education during the 2003-04 academic year, BPS transcripts will cover only the intervening academic years, up to and including 2008-09.</p>



CONFIDENTIALITY

The 2008/09 Baccalaureate and Beyond Longitudinal Study, the 2004/09 Beginning Postsecondary Students Longitudinal Study, and the 2009 Postsecondary Education Transcript Study are being conducted under the authority of the Education Sciences Reform Act of 2002 (ESRA) (Public Law 107-279). Under ESRA, NCES is authorized to collect and disseminate information about education in the United States. Collection is most often done through surveys. NCES is required to follow strict procedures to protect the confidentiality of persons in the collection, reporting, and publication of data and adheres to the guidelines issued by the Office of Management and Budget in the Federal Statistical Confidentiality Order of 1997 for ensuring the privacy and confidentiality of data collected for statistical purposes.

The Family Educational Rights and Privacy Act of 1974 (FERPA) (20 U.S.C. 1232g) allows for the release of institution record information to the Secretary of Education or her agent without prior consent of survey members (20 U.S.C. 1232g[b][3]). RTI International, as the contractor for NCES, has been given the authority to collect information from institution records under federal law.

All responses that relate to or describe identifiable characteristics of individuals may be used only for statistical purposes and may not be disclosed or used in identifiable form for any other purpose, unless otherwise compelled by law.

Protection of Electronic Files

All electronic files from institution records and student interviews will be carefully protected. Computer accounts used to access data will be password protected with multilevel controls to ensure that only those individuals with a need to access confidential information are able

to do so. For the web-based data collection, proven methods of protection for online sessions and data security will be used, and data transmitted over the Internet will be encrypted using Secure Sockets Layer (SSL) protocol. All data entry modules on the study website will be password protected, which will require the user to log in to the site before accessing confidential data. To prevent unauthorized user access, the system will automatically log the user out after 30 minutes of inactivity.

Protection of Paper Records

All paper records will be maintained in locked storage cabinets. A unique study identification variable (not the Social Security number or school ID) will be created and maintained for each survey participant to protect against disclosure of confidential data.

Preparation of Data For Public Release

All data released to the general public (for example, statistical tables) will be designed so that it will not be possible to identify specific individuals.

Violations

All personnel with access to individual data will be required to sign a confidentiality agreement and an affidavit of nondisclosure. Anyone who violates ESRA's confidentiality provisions when using the data will be found guilty of a Class E felony and may be imprisoned for up to 5 years and/or fined up to \$250,000.

RTI Request Letter

{date}

{contact_fname} {contact_lname}
{inst_name}
{inst_addr1}
{inst_addr2}
{inst_city}, {inst_st} {inst_zip}

Dear {contact_salute} {contact_lname}:

We greatly appreciate your cooperation in the 2009 Postsecondary Education Transcript Study. As Tom Weko, Associate Commissioner for the Postsecondary Studies Division of the National Center for Education Statistics, indicates in the enclosed letter, this study is designed to collect transcript data for the following students:

- Recent baccalaureate recipients sampled for the 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09); and
- Students sampled for the 2004/09 Beginning Postsecondary Students Longitudinal Study (BPS:04/09).

Authorized by federal law (P.L. 103-382), the B&B:08/09 data will provide researchers, educators, and policymakers with critical information about the role that an undergraduate education plays in the short- and long-term outcomes of bachelor's degree recipients, while the BPS:04/09 data will help them better understand what percentage of beginning students complete their degree programs; the financial, family, and school related factors that prevent students from completing their programs; and what can be done to help students complete their schooling.

I am writing to request transcripts for {sch_num} sample member{s} who attended your institution. To facilitate our coding of your institution's transcripts, it would be helpful to also receive a mapping of your institution's degree programs and courses to the Classification of Instructional Programs, if such a mapping exists. Included with this package are detailed instructions for preparing and transmitting transcript data to RTI. A list of students for whom transcripts are requested is posted, with their student ID numbers and dates of birth, at the secure study website listed in the box below. To gain access to the site, you will need to log in using the username and password printed at the bottom of this letter. Also available at the website are instructions for obtaining reimbursement for the requested transcripts, should your institution require it. We would appreciate receiving the requested transcript data on or before {DUE DATE}. Please do not hesitate to call me if you feel you need to have a later delivery date.

Thank you in advance for your timely participation in this important effort. Please feel free to contact me for additional information. You can reach me by telephone at (919) 541-6870 or e-mail at jennifer@rti.org.

Sincerely,

Jennifer Wine, Ph.D.
B&B:08/09 and BPS:04/09 Project Director

Please visit the study website for more information:

<https://surveys.nces.ed.gov/pets/>

To log in, enter the IPEDS UNITID below as your username
and enter the password below.

Your IPEDS UNITID: «entity_id»

Your password: «password»

American Association of Collegiate Registrars and Admissions Officers (AACRAO) Endorsement Letter

American Association of Collegiate Registrars and Admissions Officers



One Dupont Circle, NW, Suite 520 / Washington, DC 20036-1155
(202) 293-9161 Main / (202) 872-8857 Fax
www.aacrao.org

Dear Colleague:

I am writing to ask for your assistance with the 2009 Postsecondary Education Transcript Study (PETS:09). PETS:09 seeks transcript data from postsecondary institutions to supplement student interview data collected for two important longitudinal studies that are endorsed by AACRAO.

The 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09) collects data on a cohort of students as they complete their bachelor's degree requirements and then follows their educational and employment experiences over time. The 2004/09 Beginning Postsecondary Students Longitudinal Study (BPS:04/09) collects data on a cohort of students as they begin their postsecondary education and then follows their educational and employment outcomes over time. These studies are conducted by RTI International for the National Center for Education Statistics (NCES) in the U.S. Department of Education's Institute of Education Sciences. PETS:09 transcript data will be combined with data from student interviews, other institution records, and administrative databases to provide a total picture of these two cohorts. The enclosed materials describe the uses of the data.

Transcript data are being collected under the provisions of the *Family Educational Rights and Privacy Act* (FERPA) that allow the release of student records to the Secretary of Education or his/her agent without prior written consent from students. Both the purposes of the study and the manner in which the transcript data will be acquired comply fully with FERPA requirements.

Your cooperation and assistance in providing transcripts to RTI in a timely manner will be greatly appreciated.

Sincerely,

A handwritten signature in black ink that reads "Jerome H. Sullivan". The signature is written in a cursive style.

Jerome H. Sullivan
Executive Director

List of Endorsements

American Association of Collegiate Registrars and Admissions Officers
American Association of Community Colleges
American Association of State Colleges and Universities
American Council on Education
Association for Institutional Research
Association of Allied Schools of Health Professions
Association of American Colleges and Universities
Association of Catholic Colleges and Universities
Career College Association
The Carnegie Foundation for the Advancement of Teaching
Council of Independent Colleges
Hispanic Association of Colleges and Universities
National Accrediting Commission of Cosmetology Arts and Sciences
National Association for Equal Opportunity in Higher Education
National Association of State Universities and Land Grant Colleges
State Higher Education Executive Officers
United Negro College Fund

Instructions for Sending Data



Instructions for Sending Data

There are 5 primary steps for providing data. You will need to access the secure study website at <https://surveys.nces.ed.gov/pets>. Log in using the username and password printed at the bottom of the letter you received from RTI.

NOTE: You will need your username and password each time you log in to the website.

1 Complete the Institution Information page

On this page, you will need to provide or confirm selected information about your institution including GPA scale and grading system. This page is accessible from the Main Menu.

2 Complete the Transcript Data Transmission page

Each student's name, student ID number (if known), and date of birth will be listed on the transmission page. Please check the box next to each student whose transcript you are sending and select the mode of submission. If you are unable to provide a transcript, please enter the reason in the space provided—for example, "No record of student's attendance" or "Transcript cannot be located." Please print and retain a copy for your records.

NOTE: You must complete the Transcript Data Transmission webpage prior to sending transcript data, so that we may verify receipt of all transcript data submitted. Once you have sent the transcript data, click Submit. This page is accessible from the Main Menu.

3 Transmit Transcript Data

A number of options are available for transmitting transcript data to RTI. Each is described below.

Uploading to the Secure Study Website: Uploading electronic transcript data directly to the secure website, preferably in XML or EDI format that conforms to the PESC standard, is the preferred method for sending transcript data. If your transcript data are not in one of these formats, we ask that you or a programmer from your institution convert them to a format that we can process using the file specifications available from the link entitled "Upload transcript data in CSV or fixed-width format" on the Transcript Data Transmission page available from the Main Menu. However, if you are unable to reformat the transcript data to match the file specifications, we will accept them in their existing electronic format. *NOTE: The XML formatted transcript should adhere to the PESC XML standard format for college transcript, version 1.0.0. The EDI formatted transcript should adhere to the PESC EDI standard format for Student Educational Record (Transcript).*

Sending Transcript Data as an Encrypted Attachment by Electronic Mail: If you choose to use electronic mail (e-mail) to submit student transcript data, the attachment containing the data will need to be encrypted, using software such as SecureZIP (select the option Use FIPS 140 Mode), to ensure they are transmitted securely. SecureZIP can be downloaded free of charge

from the website: <http://www.securezip.com>. Detailed instructions for downloading and using SecureZIP can be accessed from the link "E-mail transcript data as an encrypted attachment." If you choose to use encryption software other than SecureZIP, please contact the Help Desk to ensure that the software complies with our security standards.

Once the attachment is encrypted, send to pets@rti.org and include the file names and descriptions. If you need assistance with this process, please contact the Help Desk toll-free at 1-877-256-8029 or via e-mail at pets@rti.org.

Sending Transcript Data by Secure File Transfer Protocol (sFTP): If you choose to submit transcript data using the sFTP site, please contact the Help Desk to obtain the sFTP site location and your username and password. The Help Desk may be reached toll-free at 1-877-256-8029 or via e-mail at pets@rti.org. Additional instructions on how to perform the data transfer via sFTP may be accessed from the link "Send transcript data by secure File Transfer Protocol (sFTP)." After you have successfully uploaded your files to the sFTP server, please send an e-mail to pets@rti.org with the names of the files and their structure.

Sending Transcript Data via eSCRIP-SAFE™: If you are a registered eSCRIP-SAFE™ sender and wish to use eSCRIP-SAFE™ to send your transcripts, please select RTI International, U.S. Department of Education Longitudinal Studies as the transcript recipient.

Faxing Hard Copy Transcripts: If your institution is unable to provide the transcript data electronically via any of the methods previously mentioned, you may fax transcripts to our secure fax machine at 1-866-354-7066. First, fax the Student Transcript Fax Test Page included in your institution packet, with your name, telephone number, and fax number, to ensure that the transfer is working correctly. We will then confirm that we successfully received the test page. The confirmation is typically a return fax, but in some instances it is a phone call. If you do not receive confirmation within 15 minutes, please contact the fax help line at 1-866-662-8174. Once you receive confirmation, fax the completed Student Transcript Fax Transmittal Sheet along with the transcripts. If you do not have the fax test page or transmittal sheet, you may print a copy from the link "Fax hard copy transcripts."

Once you have sent the transcript data, click Submit on the Transcript Data Transmission page.

4 Provide CIP Code Mappings

Once transcript data are received, the individual courses and degree programs reported in the transcript data will be coded using a common classification system, the National Center for Education Statistics' (NCES) Classification of Instructional Programs (CIP). The mapping(s) can be transmitted to RTI by uploading to the secure study website or sending via e-mail to pets@rti.org. If you choose to upload the mappings, please select "Upload CIP code mappings" from the Main Menu.

5 Provide Requested Course Catalogs

If we need a course catalog from your institution, there will be a Catalog Transmittal Sheet in your packet. It includes a list of the catalogs requested and instructions for sending them to RTI. If you do not find a Catalog Transmittal Sheet in your packet, then no catalogs are needed from your institution at this time.

Catalog Transmittal Sheet

«School_ID»

IPEDS ID#: «School_ID»

Name of Sender: _____

Date: _____

Telephone number: _____

In order to properly code the transcript data we will receive for your students, we need to obtain a copy of your institution’s course catalogs, bulletins, or other materials that describe the course offerings for each academic year listed below.

<cat_yr_needed> <level>

<cat_yr_needed> <level>

<cat_yr_needed> <level>

<cat_yr_needed> <level>

Instructions:

If the catalog(s) exist electronically, please send an e-mail to pets@rti.org and either direct us to the catalog(s) online or send the catalog(s) as an attachment. If you need to send hard copy catalogs, please place check marks in the appropriate columns below to indicate the types of course catalogs you are sending for each year. Please do not send catalogs for which “not needed” appears. Please keep a copy of this completed sheet for your records and send the original to RTI with the catalogs using the FedEx materials provided.

Academic Year	Type of catalog provided <i>(please place checks or comments as appropriate)</i>			
	Institution-wide/general	Undergraduate	Graduate	Other school/program <i>(please specify)</i>
2003-2004				
2004-2005				
2005-2006				
2006-2007				
2007-2008				
2008-2009				
Other year				

Student Transcript Fax Test Page

«School_ID»

IPEDS ID#: «School_ID»

Name of Sender: _____

Date: _____

Telephone number: _____

Fax number: _____

Instructions:

Please fax this document to 1-866-354-7066 as a test page.

You will receive a confirmation that we received your fax. Once you have our confirmation, please fax the completed Student Transcript Fax Transmittal Sheet that you received in your packet and your students' transcripts to the same number.

If you need assistance, please contact our Fax Helpline at 1-866-662-8174.

****WARNING: This transmission contains confidential information. Please exercise appropriate security. ****

Student Transcript Fax Transmittal Sheet

«School_ID»

IPEDS ID#: «School_ID»

Name of Sender: _____

Date: _____

Telephone number: _____

Fax number: _____

Number of pages: _____

Number of sampled students: «school_name»

Number of students whose transcripts you are sending: _____

Number of transcripts you are sending (there could be multiple per student): _____

Instructions:

Be sure that you have faxed the Student Transcript Fax Test Page and been contacted to confirm its receipt before sending this page or the transcripts.

If a student transferred to your institution from another institution, please also send copies of any transcripts that you have from other institutions (unless that information is already included on the transcript from your institution).

Once you have filled out the top of this document, please fax it and student transcripts to 1-866-354-7066.

If you need assistance, please contact our Fax Helpline at 1-866-662-8174.

Family Educational Rights and Privacy Act Regulations (FERPA) Excerpt

This excerpt only includes relevant information for study participation.

Family Educational Rights and Privacy Act Regulations

34 CFR Part 99

Subpart A—General

Section

99.1 To which education agencies or institutions do these regulations apply?

99.2 What is the purpose of these regulations?

99.3 What definitions apply to these regulations?

99.4 What are the rights of parents?

99.5 What are the rights of students?

99.7 What must an educational agency or institution include in its annual notification?

99.8 What provisions apply to records of a law enforcement unit?

Subpart B—What Are the Rights of Inspection and Review of Education Records?

Section

99.10 What rights exist for a parent or eligible student to inspect and review education records?

99.11 May an educational agency or institution charge a fee for copies of education records?

99.12 What limitations exist on the right to inspect and review records?

Subpart C – What Are the Procedures for Amending Education Records?

Section

99.20 How can a parent or eligible student request amendment of the student's education records?

99.21 Under what conditions does a parent or eligible student have the right to a hearing?

99.22 What minimum requirements exist for the conduct of a hearing?

Subpart D—May an Educational Agency or Institution Disclose Personally Identifiable Information From Education Records?

Section

99.30 Under what conditions is prior consent required to disclose information?

99.31 Under what conditions is prior consent not required to disclose information?

99.32 What recordkeeping requirements exist concerning requests and disclosures?

99.33 What limitation apply to the redisclosure of information?

99.34 What conditions apply to disclosure of information to other education agencies or institutions?

99.35 What conditions apply to disclosure of information for Federal or State program purposes?

99.36 What conditions apply to disclosure of information in health and safety emergencies?

99.37 What conditions apply to disclosing directory information?

99.38 What conditions apply to disclosure of information as permitted by State stature adopted after November 19, 1974 concerning the juvenile justice system?

99.39 What definitions apply to the nonconsensual disclosure of records by postsecondary educational institutions in connection with disciplinary proceedings concerning crimes of violence or non-forcible sex offenses?

Subpart E – What are the Enforcement Procedures?

Section

99.60 What functions has the Secretary delegated to the Office and to the Office of Administrative Law Judges?

99.61 What responsibility does an educational agency or institution have concerning conflict with State or local laws?

99.62 What information must an educational agency or institution submit to the Office?

99.63 Where are complaints filed?

99.64 What is the complaint procedure?

99.65 What is the content of the notice of complaint issued by the Office?

99.66 What are the responsibilities of the Office in the enforcement process?

99.67 How does the Secretary enforce decisions?

AUTHORITY: 20 U.S.C. 1232g unless otherwise noted.

PART 99 – FAMILY EDUCATIONAL RIGHTS AND PRIVACY

The authority citation for part continues to read as follows:

AUTHORITY: 20 U.S.C. 1232g, unless otherwise noted.

Subpart A—General

§ 99.1 To which educational agencies or institutions do these regulations apply?

(a) Except as otherwise noted in § 99.10, this part applies to an educational agency or institution to which funds have been made available under any program administered by the Secretary, if—

(1) The educational institution provides educational services or instruction, or both, to students; or

(2) The educational agency is authorized to direct and control public elementary secondary, or postsecondary educational institutions.

(b) This part does not apply to an educational agency or institution solely because students attending that agency or institution receive non-monetary benefits under a program referenced in paragraph (a) of this section, if no funds under that program are made available to the agency or institution.

on the contested information in the record or stating why he or she disagrees with the decision of the agency or institution, or both.

(c) If an educational agency or institution places a statement in the education records of a student under paragraph (b)(2) of this section, the agency or institution shall:

(1) Maintain the statement with the contested part of the record for as long as the record is maintained; and

(2) Disclose the statement whenever it discloses the portion of the record to which the statement relates.

(Authority: 20 U.S.C 1232g(a)(2))

§99.22 What minimum requirements exist for the conduct of a hearing?

The hearing require by § 99.21 must meet, at a minimum, the following requirements:

(a) The educational agency or institution shall hold the hearing within a reasonable time after it has received the request for the hearing from the parent or eligible student.

(b) The educational agency or institution shall give the parent or eligible student notice of the date, time, and place, reasonably in advance of the hearing.

(c) the hearing may be conducted by any individual, including an official of the educational agency or institution, who does not have a direct interest in the outcome of the hearing.

(d) The educational agency or institution shall give the parent or eligible student a full and fair opportunity to present evidence relevant of the issues raised under § 99.21. The parent or eligible student may, at their own expense, be assisted or represented by one or more individuals of his or her own choice, including an attorney.

(e) The educational agency or institution shall make its decision in writing within a reasonable period of time after the hearing.

(f) The decision must be based solely on the evidence presented at the hearing, and must include a summary of the evidence and the reasons for the decision.

(Authority: 20 U.S.C 1232g(a)(2))

Subpart D—May an Educational Agency or Institution Disclose Personally Identifiable Information From Education Records?

§ 99.30 Under what conditions is prior consent required to disclose information?

(a) The parent or eligible student shall provide a signed and dated written consent before an educational agency or institution discloses personally identifiable information from the student's education records, except as provided in § 99.31.

(b) The written consent must:

(1) Specify the records that may be disclosed;

(2) State the purpose of the disclosure; and

(3) Identify the party or class of parties to whom the disclosure may be made.

(c) When a disclosure is made under paragraph

(a) of this section:

(1) If a parent or eligible student so requests, the educational agency or institution shall provide him or her with a copy of the records disclosed; and

(2) If the parent of a student who is not an

eligible student to requests, the agency or institution shall provide the student with a copy of the records disclosed.

(Authority: 20 U.S.C 1232g (b)(1) and (b)(2)(A))

§ 99.31 Under what conditions is prior consent not required to disclose information?

(a) An educational agency or institution may disclose personally identifiable information from an education record of a student without the consent required by § 99.30 if the disclosure meets one or more of the following conditions:

(1) The disclosure is to other school officials, including teachers, within the agency or institution who the agency or institution has determined to have legitimate educational interests.

(2) The disclosure is, subject to the requirements of § 99.34, to officials of another school, school system, or institution of postsecondary education where the student seeks or intends to enroll.

(3) The disclosure is, subject to the requirements of § 99.35, to authorized representatives of—

(i) The comptroller General of the United States;

(ii) The Attorney General of the United States;

(iii) The Secretary; or

(iv) State and local educational authorities.

(4)(i) The disclosure is in connection with financial aid for which the student has applied or which the student has received, if the information is necessary for such purposes as to:

(A) Determine eligibility for the aid;

(B) Determine the amount of the aid;

(C) Determine the conditions for the aid; or

(D) Enforce the terms and conditions of the aid.

(ii) As used in paragraph (a)(4)(i) of this section, “financial aid” means a payment of funds provided to an individual (or a payment in kind of tangible or intangible property to the individual) that is conditioned on the individual’s attendance at an educational agency or institution.

(Authority: 20 U.S.C 1232g(b)(1)(D))

(5)(i) The disclosure is to State and local official or authorities to whom this information is specifically—

(A) Allowed to be reported or disclosed pursuant to a State statute adopted before November 19, 1974, if the allowed reporting or disclosure concerns the juvenile justice system and the system’s ability to effectively serve the student whose records are released; or

(B) Allowed to be reported or disclosed pursuant to a State statute adopted after November 19, 1974, subject to the requirements of § 99.38.

(ii) Paragraph (a)(5)(1) of this section does not prevent a State from further limiting number or type of State or local officials to whom disclosure may be made under that paragraph.

(6)(i) The disclosure is to organizations conducting studies for, or on behalf of, educational agencies or institutions to:

(A) Develop, validate, or administer predictive tests;

(B) Administer student aid programs; or

(C) Improve instruction.

(iii) The agency or institution may disclose in

formation under paragraph (a)(6)(i) of this section if:

(A) The study is conducted in a manner that does not permit personal identification of parents and students by individuals other than representatives of the organization; and

(B) The information is destroyed when no longer needed for the purposes for which the study was conducted.

(iii) If this Office determines that a third party outside the educational agency or institution to whom information is disclosed under this paragraph (a)(6) violates paragraph (a)(6)(ii)(B) of this section, the educational agency or institution may not allow that third party access to personally identifiable information from education records for at least five years.

(iv) For the purposes of paragraph (a)(6) of this section, the term “organization” includes, but is not limited to, Federal, State, and local agencies, and independent organizations.

(7) The disclosure is to accrediting organization to carry out their accrediting functions.

(8) The disclosure is to parents, as defined in § 99.3, of a dependent student, as defined in section 152 of the Internal Revenue Code of 1986.

(9)(i) The disclosure is to comply with a judicial order or lawfully issued subpoena.

(ii) The educational agency or institution may disclose information under paragraph (a)(9)(i) of this section only if the agency or institution makes a reasonable effort to notify the parent or eligible student of the order or subpoena in advance of compliance, so that the parent or eligible student may seek protective action, unless the disclosure is in compliance with—

(A) A Federal grand jury subpoena and the court has order that the existence or the contents of the subpoena or the information furnished in response of the subpoena not be disclosed; or

(B) Any other subpoena issued for a law enforcement purpose and the court or other issuing agency has ordered that the existence or the contents of the subpoena or the information furnished in the response to the subpoena not be disclosed.

(iii)(A) If an educational agency or institution initiates legal action against a parent or student, the educational agency or institution may disclose to the court, without a court order or subpoena, the education records of the student that are relevant for the educational agency or institution to proceed with the legal action as plaintiff.

(B) If a parent or eligible student initiates legal action against an educational agency or institution, the educational agency or institution may disclose to the court, without a court order or subpoena, the student’s education records that are relevant for the educational agency or institution to defend itself.

(10) The disclosure is in connection with a health or safety emergency, under the conditions described in § 99.36.

(11) The disclosure is information the educational agency or institution has designated as “directory information,” under the condition described in § 99.37.

(12) The disclosure is to the parent of a student who is not an eligible student or to the student.

(13) The disclosure, subject to the requirements in § 99.39, is to a victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense. the disclosure may only include the final results of the disciplinary proceeding conducted by the institution of postsecondary education with respect to that alleged crime or offense. The institution may disclose the final results of the disciplinary proceeding, regardless of whether the institution concluded a violation was committed.

(14)(i) The disclosure, subject to the requirements in § 99.39, is in connection with a disciplinary proceeding at an institution of

postsecondary education. The institution must not disclose the final results of the disciplinary proceeding unless it determines that—

(A) The student is an alleged perpetrator of a crime of violence or non-forcible sex offense: and

(B) With respect to the allegation made against him or her, the student has committed a violation of the institution’s rules or policies.

(ii) The institution may not disclose the name of any other student, including a victim or witness, without the prior written consent of the other student.

(iii) This section applies only to the disciplinary proceedings in which the final results were reached on or after October 7, 1998.

(15)(i) The disclosure is to a parent of a student at an institution of postsecondary education regarding the student’s violation of any Federal, State, or local law, or of any rule or policy of the institution, governing the use or possession of alcohol or a controlled substance if—

(A) The institution determines that the student has committed a disciplinary violation with respect to that use or possession; and

(B) The student is under the age of 21 at the time of the disclosure to the parent.

(iii) Paragraph (a)(15) of this section does not supersede any provision of State law that prohibits an institution of postsecondary education from disclosing information.

(b) Paragraph (a) of this section does not forbid an educational agency or institution from disclosing, nor does it require an educational agency or institution to disclose, personally identifiable information from the education records of a student to any parties under paragraphs (a)(1) through (11), (13), (14), and (15) of this section.

(Authority: 20 U.S.C 1232g(a)(5)(A), (b)(1), (b)(2)(B), (b)(6), (h) and (i))

§ 99.32 What recordkeeping requirements exist concerning requests and disclosures?

(a)(1) An educational agency or institution shall maintain a record of each request for access to and each disclosure of personally identifiable information from the education records of each student.

(2) The agency or institution shall maintain the record with the education records of the student as long as the records are maintained.

(3) For each request or disclosure the record must include:

(i) The parties who have requested or received personally identifiable information from the education records; and

(ii) The legitimate interests the parties had in requesting or obtaining the information.

(b) If an educational agency or institution discloses personally identifiable information from an education record with the understanding authorized under § 99.33(b), the record of the disclosure required under this section must include:

(1) The names of the additional parties to which the receiving party may disclose the information on behalf of the educational agency or institution; and

(2) The legitimate interests under § 99.31 which each of the additional parties has in requesting or obtaining the information.

(c) The following parties may inspect the record relating to each student:

(1) The parent or eligible student.

(2) The school official or his or her assistants who are responsible for the custody of the records.

(3) Those parties authorized in § 99.31(a)(1) and (3) for the purposes of auditing the recordkeeping procedures of the educational agency or institution.

(d) Paragraph (a) of this section does not apply if the request was from, or the disclosure was to:

(1) The parent or eligible student;

(2) A school official under § 99.31 (a)(1);

(3) A party with written consent from the parent or eligible student;

(4) A party seeking directory information; or

(5) A party seeking or receiving the records as directed by a Federal grand jury or other law enforcement subpoena and the issuing court or other issuing agency has ordered that the existence or the contents of the subpoena or the information furnished in response to the subpoena not be disclosed.

(Approved by the Office of Management and Budget under control number 1880-0508)

(Authority: 20 U.S.C 1232g(b)(1) and (b)(4)(A))

§ 99.33 What limitations apply to the redisclosure of information?

(a)(1) An educational agency or institution may disclose personally identifiable information from an education record only on the condition that the party to whom the information is disclosed will not disclose the information to any other party without the prior consent of the parent or eligible student.

(2) The officers, employees, and agents of a party that receives information under paragraph (a)(1) of this section may use the information, but only for the purposes for which the disclosure was made.

(b) Paragraph (a) of this section does not prevent an educational agency or institution from disclosing personally identifiable information with the understanding that the party receiving the information may make further disclosure of the information on behalf of the educational agency or institution if:

(1) The disclosures meet the requirements of § 99.31; and

(2) The educational agency or institution has complied with the requirements of § 99.32(b).

(c) Paragraph (a) of this section does not apply to disclosures made to parents of dependent students under § 99.31(a)(8), to disclosures made pursuant to court orders, lawfully issued subpoenas, or litigation under § 99.31(a)(9), to disclosures of directory information under § 99.31(a)(11), to disclosures made to a parent or student under § 99.31(a) (12), to disclosures made in connection with a disciplinary proceedings under § 99.31(a) (14), or to disclosures made to parents under § 99.31(a)(15).

(d) Excerpt for disclosures under § 99.31(a) (9), (11) and (12), and educational agency or institution shall inform a party to whom disclosure is made of the requirements of this section.

(e) If this Office determines that a third party improperly rediscloses personally identifiable information from education records in violation of § 99.33(a) of this section, the educational agency or institution may not allow that third party access to personally identifiable information from education records for at least five years.

(Authority: 20 U.S.C 1232g(b)(4)(B))

§ 99.34 What conditions apply to disclosure of information to other educational agencies or institutions?

(a) An educational agency or institution that discloses an education record under § 99.31(a)(2) shall:

(1) Make a reasonable attempt to notify the parent or eligible student at the last known address of the parent or eligible student, unless:

(i) The disclosure is initiated by the parent or eligible student; or

(ii) The annual notification of the agency or institution under § 99.7 includes a notice that the agency or institution forwards education records to other agencies or institutions that have requested the records and in which the student seeks or intends to enroll:

(2) Give the parent or eligible student, upon request, a copy of the record that was disclosed; and

(3) Give the parent or eligible student, upon request, an opportunity for a hearing under Subpart C.

(b) An educational agency or institution may disclose an education record of a student in attendance to another educational agency or institution if:

(1) The student is enrolled in or receives services from the other agency or institution; and

(2) The disclosure meets the requirements of paragraph (a) of this section.

(Authority: 20 U.S.C 1232g(b)(1)(B))

§ 99.35 What conditions apply to disclosure of information for Federal or State program purposes?

(a) The officials listed in § 99.31(a)(3) may have access to education records in connection with an audit or evaluation of Federal or State supported education programs, or for the enforcement of or compliance with Federal legal requirements which relate to those programs.

(b) Information that is collected under paragraph (a) of this section must:

(1) Be protected in a manner that does not permit personal identification of individuals by anyone except the officials referred to in paragraph (a) of this section; and

(2) Be destroyed when no longer needed for the purposes listed in paragraph (a) of this section.

(c) Paragraph (b) of this section does not apply if:

(1) The parent or eligible student has given written consent for the disclosure under § 99.30; or

(2) The collection of personally identifiable information is specifically authorized by Federal law.

(Authority: 20 U.S.C 1232g(b)(3))

§ 99.36 What conditions apply to disclosure of information in health and safety emergencies?

(a) An educational agency or institution may disclose personally identifiable information from an education record to appropriate parties in connection with an emergency if knowledge of the information is necessary to protect the health or safety of the student or other individuals.

(b) Nothing in the Act or this part shall prevent an educational agency or institution from—

(1) Including in the education records of a student appropriate information

Disclosure Notice

The transcript data for this student have been provided to RTI International, a not-for-profit research organization and agent for the National Center for Education Statistics, U.S. Department of Education. This disclosure statement fulfills the requirements of 34 CFR 99.32(a) pursuant to the *Family Educational Rights and Privacy Act* (FERPA) (20 U.S.C. 1232g).

The transcript data were requested for the 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09) or the 2004/09 Beginning Postsecondary Students Longitudinal Study (BPS:04/09). Data from these records will be combined with others into statistical summaries and tables and may not be used in identifiable form for any purpose unless otherwise compelled by law (Education Sciences Reform Act of 2002, Section 183).

The collection of information in this study is authorized by the Education Sciences Reform Act of 2002, Public Law 107-279. Participation is voluntary. Information will be protected from disclosure by federal statute (20 USC 9003a-9007, as amended).

B&B:08/09
OMB # 1850-0729
Expiration Date: 02/28/2011

BPS:04/09
OMB # 1850-0631
Expiration Date: 04/30/2011

Appendix I

Data Elements for Keying and Coding System

Data Elements for Keying and Coding System

School Info

- Calendar system
- Grade point average (GPA) scale
- Grading system
- Quality points

Case Info

- First name
- Middle name
- Last name
- Former last name
- Address 1
- Address 2
- City
- State/province
- Country (if not USA)
- ZIP code
- H.S. graduation date (month)
- H.S. graduation date (year)

Schools/Terms

- School entry
 - Name
 - City
 - State
 - Unknown school
- School Info
 - First enrolled (month)
 - First enrolled (year)
 - Cumulative GPA
 - Transfer credits attempted
 - Transfer credits accepted
 - Transfer credits for GPA
 - Did the student take a state basic skills test?

- Terms (info)
 - Attended
 - Term name
 - Start date (month)
 - Start date (year)
 - End date (month)
 - End date (year)

Academics

- Honors
- Probations

Tests

- Date taken (month)
- Date taken (year)
- Exam
- Scores (may be subdivided, e.g., verbal, math, writing)

Degrees/Majors

- Program
- Degree name
- Bach. Type
- Grad honors
- Degree received
- Date rec'd (month)
- Date rec'd (year)
- Honors program participant
- Professional certificate or licensure earned
- Major 1
- Major 1 CIP
- Major 1 uncodable reason
- Major 2
- Major 2 CIP
- Major 2 uncodable reason
- Minor 1
- Minor 1 CIP
- Minor 1 uncodable reason
- Minor 2
- Minor 2 CIP
- Minor 2 uncodable reason
- Concentration
- Concentration uncodable reason

Courses

- Course Info
 - Course ID
 - Course Name
 - CIP
 - Uncodable reason
 - Needs review
 - Repeated
 - Does NOT count toward GPA
 - Honors
 - Credits measured by: credit hours/clock hours
 - Earned (credits)
 - Start date (month)
- Start date (year)
- End data (month)
- End date (year)
- Grade
- Grade (num)
- Other grade
- Grade/quality points
- Select attribute
- Select credit
- School Summary
 - Earned credits
 - Grade points
 - GPA
 - Clock hours completed

Appendix J

Imputation Rates

Table J-1. Item response rates and nonresponse rates for items collected in the B&B:08/09 interview: 2009

Variable	Description	Item respondents	Item response rate	Item nonresponse rate
B1ADMSUP	Teacher satisfaction: administrative support	2,050	67.58	32.42
B1ALONE	Household composition: live alone	14,460	93.49	6.51
B1APCOMP	Reason didn't apply for a teaching position: difficult application	2,070	71.66	28.34
B1APLFP	Labor force participation in April 2009	14,230	92.64	7.36
B1ART	Taught art since bachelor's	14,990	99.45	0.55
B1ART09	Currently teach arts/music in 2009	14,990	99.45	0.55
B1ART1	First job, taught arts/music	15,000	99.55	0.45
B1BRLN	Income-based repayment in 2009	14,680	96.41	3.59
B1CARIND	Job part of a career in industry	8,630	91.25	8.75
B1CARPAY	Car payment amount	14,310	92.47	7.53
B1CART	Content area certification: arts and music	1,390	57.98	42.02
B1CENGL	Content area certification: English or language arts	1,390	57.98	42.02
B1CESL	Content area certification: English as a second language	1,390	57.98	42.02
B1CFLNG	Content area certification: foreign languages	1,390	57.98	42.02
B1CGENA	Content area certification: elementary education	1,390	57.98	42.02
B1CGENB	Content area certification: secondary education	1,390	57.98	42.02
B1CHELTH	Content area certification: health/physical education	1,390	57.98	42.02
B1CITZN	U.S. citizenship status	14,810	96.16	3.84
B1CLSIZE	Teacher satisfaction: class size	2,050	67.58	32.42
B1CMATH	Content area certification: math or computer science	1,390	57.98	42.02
B1CMNT01	Receive help in first teaching job: working with parents/community	1,330	57.41	42.59
B1COBEN	Undergraduate education worth the financial cost	14,530	94.16	5.84
B1COMSRV	Volunteered in last 12 months	14,480	93.74	6.26
B1COTHER	Content area certification: other	1,390	57.98	42.02
B1CRELOC	Live more than 50 miles from NPSAS	14,480	93.69	6.31
B1CRTMY	Date first certified to teach	1,380	57.74	42.26
B1CSCIEN	Content area certification: natural sciences	1,390	57.98	42.02
B1CSOSCI	Content area certification: social sciences	1,390	57.98	42.02
B1CSPCED	Content area certification: special education	1,390	57.98	42.02
B1CURCAR	Job description: exploring career options	1,390	63.02	36.98
B1CURCRT	Certified to teach at the K–12 level	3,220	77.20	22.80
B1CUREDU	Job description: working to prepare for further education	1,390	63.02	36.98
B1CUREST	Job description: continuing in job held before [NPSAS] graduation	1,390	63.02	36.98
B1CURFUT	Job description: deciding on future education/career	1,390	63.02	36.98
B1CURHRS	Hours worked weekly	10,480	98.69	1.31
B1CURINT	Job description: job while pursuing other interests	1,390	63.02	36.98
B1CUROTH	Job description: other	1,390	63.02	36.98
B1CURPAY	Job description: just paying the bills	1,390	63.02	36.98
B1CURSCH	Job description: job while in school	320	26.55	73.45
B1CVOCTC	Content area certification: vocational/career/technical education	1,390	57.98	42.02
B1DAGE	Age of youngest dependent	2,450	70.88	29.12
B1DEP2	Number of dependents	14,470	93.66	6.34
B1DEPS	Any dependents	14,480	93.73	6.27
B1DISC01	Receive help in first teaching job: disciplining students	1,330	57.41	42.59
B1DISMOB	Disability: mobility impairment	14,480	93.65	6.35
B1DISOTH	Disability: other	14,460	93.67	6.33
B1DISSEN	Disability: sensory impairment	14,480	93.79	6.21
B1DPNTS	Household composition: live with children or dependents	14,460	93.49	6.51

See notes at end of table.

Table J-1. Item response rates and nonresponse rates for items collected in the B&B:08/09 interview: 2009—Continued

Variable	Description	Item respondents	Item response rate	Item nonresponse rate
B1DSCP01	Feel prepared in first teaching job: classroom management	1,350	58.01	41.99
B1EARNT	Time frame for earnings	10,700	95.73	4.27
B1EE09	Currently teach elementary education in 2009	14,990	99.45	0.55
B1EE1	First job, taught elementary education	15,000	99.55	0.45
B1ELED	Taught elementary education since bachelor's	14,990	99.44	0.56
B1EMPDIS	Reason not working for pay: disabled	1,530	88.91	11.09
B1EMPHM	Reason not working for pay: homemaker	1,530	88.91	11.09
B1EMPHX	Employment history since graduation as of 2009	14,280	92.67	7.33
B1EMPLI	Employer offers benefits: life insurance	11,530	93.23	6.77
B1EMPMI	Employer offers benefits: medical or health insurance	11,530	93.23	6.77
B1EMPMY	Date began job	10,550	92.77	7.23
B1EMPOTH	Employer offers benefits: other	11,530	93.23	6.77
B1EMPRB	Employer offers benefits: retirement or other financial benefits	11,530	93.23	6.77
B1EMPRT	Employed full-time or part-time	11,790	93.56	6.44
B1EMPTMP	Reason not working for pay: waiting to report to work or layoff	1,530	88.91	11.09
B1EMPTRV	Reason not working for pay: traveling	1,530	88.91	11.09
B1EMPTYP	Type of employer	11,780	93.43	6.57
B1EMPVOL	Reason not working for pay: volunteering	1,530	88.91	11.09
B1ENG	Taught English since bachelor's	14,990	99.44	0.56
B1ENG09	Currently teach English/language arts in 2009	14,990	99.45	0.55
B1ENG1	First job, taught English/language arts	15,000	99.55	0.45
B1ENGL	English as native language	14,490	93.90	6.10
B1ENIN09	Enrollment intensity in 2009	14,910	98.79	1.21
B1ENR09	Current school 2009 enrollment K–12	1,210	82.08	17.92
B1ENR1	First school enrollment K–12	1,130	82.77	17.23
B1ENRST	Enrollment status in 2009	5,250	94.88	5.12
B1ERNAMT	Amount earned from job	10,660	95.42	4.58
B1ESL	Taught ESL since bachelor's	14,990	99.44	0.56
B1ESL09	Currently teach ESL in 2009	14,990	99.45	0.55
B1ESL1	First job, taught ESL	15,000	99.55	0.45
B1EVRTCH	Taught grades K–12 since graduating from NPSAS	15,000	99.72	0.28
B1EVRVT	Ever voted in an election	14,720	95.58	4.42
B1EXPAP	Academic experiences at NPSAS: placed on academic probation	14,560	94.30	5.70
B1EXPDL	Academic experiences at NPSAS: placed on Dean's List	14,560	94.30	5.70
B1EXPGH	Academic experiences at NPSAS: graduated with academic honors	14,560	94.30	5.70
B1EXPIN	Academic experiences at NPSAS: received an incomplete grade	14,560	94.30	5.70
B1EXPRP	Academic experiences at NPSAS: repeated course for higher grade	14,560	94.30	5.70
B1EXPWD	Academic experiences at NPSAS: withdrew from course	14,560	94.30	5.70
B1FAM	Reason didn't apply for a teaching position: personal reasons	2,070	71.66	28.34
B1FINBLO	Postbaccalaureate financial aid type: private education/bank loans	5,260	95.04	4.96
B1FINETR	Postbaccalaureate financial aid type: employer tuition assistance	5,260	95.04	4.96
B1FINFEL	Postbaccalaureate financial aid type: fellowships	5,260	95.04	4.96
B1FINGR	Postbaccalaureate financial aid type: grants or scholarships	5,260	95.04	4.96
B1FINNON	Postbaccalaureate financial aid type: none	5,260	95.04	4.96
B1FINOGA	Postbaccalaureate financial aid type: other graduate assistantship	5,260	95.04	4.96
B1FINOTH	Postbaccalaureate financial aid type: other	5,260	95.04	4.96
B1FINPL	Postbaccalaureate financial aid type: personal loan or gift	5,260	95.04	4.96
B1FINRA	Postbaccalaureate financial aid type: research assistantship	5,260	95.04	4.96

See notes at end of table.

Table J-1. Item response rates and nonresponse rates for items collected in the B&B:08/09 interview: 2009—Continued

Variable	Description	Item respondents	Item response rate	Item nonresponse rate
B1FINTA	Postbaccalaureate financial aid type: teaching assistantship	5,260	95.04	4.96
B1FL09	Currently teach foreign languages in 2009	14,990	99.45	0.55
B1FL1	First job, taught foreign languages	15,000	99.55	0.45
B1FLN	Taught foreign language since bachelor's	14,990	99.44	0.56
B1FOR09	Current school 2009 was a foreign school	2,080	95.58	4.42
B1FOR1	First school taught was a foreign school	2,090	96.21	3.79
B1FRPL09	Current school 2009 percent free or reduced price lunch eligible	1,070	88.12	11.88
B1FRPL1	First school percent free or reduced price lunch eligible	1,010	86.50	13.50
B1FUTENR	Expect to pursue degree or certificate in future	9,270	93.70	6.30
B1G1FSDT	Date began first postbaccalaureate degree program	5,230	94.34	5.66
B1GR1CON	First postbaccalaureate institution control	5,230	94.05	5.95
B1GR1DG	First postbaccalaureate degree type enrollment, as of 2009	5,230	94.37	5.63
B1GR1LEV	First postbaccalaureate institution level	5,220	93.85	6.15
B1GRE	Took graduate or professional entrance exam	7,180	91.81	8.19
B1GRFUTR	Future postbaccalaureate enrollment in 2009	14,880	98.49	1.51
B1HIDEG	Highest degree attained as of 2009	15,030	99.96	0.04
B1HIENR	Highest postbaccalaureate enrollment as of 2009	15,010	99.71	0.29
B1HIGH09	Current school 2009 highest grade level offered	2,020	91.99	8.01
B1HIGH1	First school highest grade level offered	2,020	92.63	7.37
B1HIGR09	Current, highest grade taught in 2009	1,380	90.40	9.60
B1HIGR1	First, highest grade taught	1,300	90.52	9.48
B1HOTH	Household composition: someone not listed	14,460	93.49	6.51
B1HOUSE	Own home and/or pay rent	14,480	93.72	6.28
B1HPE	Taught health or physical education since bachelor's	14,990	99.44	0.56
B1HPE09	Currently teach health/physical education in 2009	14,990	99.45	0.55
B1HPE1	First job, taught health/physical education	15,000	99.55	0.45
B1HRELOC	Live more than 50 miles from high school	14,470	93.75	6.25
B1ICAM01	Time frame for base salary in [REJBTP01] position	1,370	44.36	55.64
B1ICAM02	Time frame for base salary in [REJBTP02] position	320	23.51	76.49
B1ICAM03	Time frame for base salary in [REJBTP03] position	50	4.95	95.05
B1ICAM04	Time frame for base salary in [REJBTP04] position	10	0.46	99.54
B1ICAM05	Time frame for base salary in [REJBTP05] position	#	#	100.00
B1ICAM06	Time frame for base salary in [REJBTP06] position	#	0.17	99.83
B1ICAM07	Time frame for base salary in [REJBTP07] position	#	0.17	99.83
B1INCHO	Satisfaction with quality of education at NPSAS	14,540	94.17	5.83
B1INCSP	Spouse's income in 2008	3,010	83.04	16.96
B1IND01	Participated in formal teacher induction program in first teaching job	1,350	58.06	41.94
B1INT01	Participated in teacher internship program in first teaching job	1,350	57.96	42.04
B1INVR01	Feel prepared in first teaching job: instructional methods	1,350	58.01	41.99
B1JBCR01	Currently working in teaching job 1	2,070	68.01	31.99
B1JBCR02	Currently working in teaching job 2	390	28.96	71.04
B1JBCR03	Currently working in teaching job 3	60	6.16	93.84
B1JBCR04	Currently working in teaching job 4	10	0.46	99.54
B1JBCR05	Currently working in teaching job 5	#	0.17	99.83
B1JBCR06	Currently working in teaching job 6	#	0.17	99.83
B1JBCR07	Currently working in teaching job 7	#	0.17	99.83
B1JBIC01	Base salary in [REJBTP01] position	1,360	44.09	55.91
B1JBIC02	Base salary in [REJBTP02] position	320	23.50	76.51

See notes at end of table.

Table J-1. Item response rates and nonresponse rates for items collected in the B&B:08/09 interview: 2009—Continued

Variable	Description	Item respondents	Item response rate	Item nonresponse rate
B1JBIC03	Base salary in [REJBTP03] position	50	4.95	95.05
B1JBIC04	Base salary in [REJBTP04] position	10	0.46	99.54
B1JBIC05	Base salary in [REJBTP05] position	#	#	100.00
B1JBIC06	Base salary in [REJBTP06] position	#	0.17	99.83
B1JBIC07	Base salary in [REJBTP07] position	#	0.17	99.83
B1JBIMPO	Challenge satisfaction	11,780	93.46	6.54
B1JBOS01	Other school-related income while in [REJBTP01] position	1,330	44.13	55.87
B1JBOS02	Other school-related income while in [REJBTP02] position	320	23.34	76.66
B1JBOS03	Other school-related income while in [REJBTP03] position	50	5.31	94.69
B1JBOS04	Other school-related income while in [REJBTP04] position	10	0.46	99.54
B1JBOS05	Other school-related income while in [REJBTP05] position	#	#	100.00
B1JBOS06	Other school-related income while in [REJBTP06] position	#	0.17	99.83
B1JBOS07	Other school-related income while in [REJBTP07] position	#	0.17	99.83
B1JBOVER	Overall satisfaction	11,780	93.46	6.54
B1JBPAY	Salary satisfaction	11,780	93.46	6.54
B1JBSECR	Job security satisfaction	11,780	93.46	6.54
B1JBTP01	Type of K–12 teaching position 1	2,080	68.37	31.63
B1JBTP02	Type of K–12 teaching position 2	390	28.96	71.04
B1JBTP03	Type of K–12 teaching position 3	60	6.16	93.84
B1JBTP04	Type of K–12 teaching position 4	10	0.46	99.54
B1JBTP05	Type of K–12 teaching position 5	#	0.17	99.83
B1JBTP06	Type of K–12 teaching position 6	#	0.17	99.83
B1JBTP07	Type of K–12 teaching position 7	#	0.17	99.83
B1JSTAT	Working for pay	15,030	99.91	0.09
B1LANGS	Best-known second language	9,400	90.45	9.55
B1LEV09	Current school 2009 level	2,000	91.31	8.69
B1LGCAR	Currently use non-English language in career	10,700	91.31	8.69
B1LNEDU	Undergraduate loan debt influenced employment: work instead of school	4,590	74.84	25.17
B1LNFGN	Loan payments: paid through a loan forgiveness program	5,960	93.20	6.80
B1LNFRGV	Aware of teacher loan forgiveness programs	4,510	82.43	17.57
B1LNGCLS	Last time a non-English language class was taken	10,730	91.55	8.45
B1LNGCUR	Regularly interact with others in non-English language	10,550	91.40	8.60
B1LNGPLN	Plan to use non-English language in career	10,700	91.34	8.66
B1LNGPST	Frequency of non-English language spoken at home	10,560	91.51	8.49
B1LNHLP	Loan payments: paid by family or friends	5,960	93.20	6.80
B1LNINCT	Teacher loan forgiveness programs influential	1,310	58.04	41.96
B1LNINFL	Undergraduate loan debt influenced employment plans	10,090	86.59	13.41
B1LNINHR	Undergraduate loan debt influenced employment: had to work more hours	4,590	74.84	25.17
B1LNINJB	Undergraduate loan debt influenced employment: took less desirable job	4,590	74.84	25.17
B1LNINMR	Undergraduate loan debt influenced employment: more than one job	4,590	74.84	25.17
B1LNINOT	Undergraduate loan debt influenced employment: other reasons	4,590	74.84	25.17
B1LNINST	Undergraduate loan debt influenced employment: took job outside field	4,590	74.84	25.17
B1LNPRT	Participated in teacher loan forgiveness program	870	48.25	51.75
B1LNREAD	Proficiency of non-English language: reading	10,350	91.16	8.84
B1LNSPEK	Proficiency of non-English language: speaking	10,360	91.25	8.75

See notes at end of table.

Table J-1. Item response rates and nonresponse rates for items collected in the B&B:08/09 interview: 2009—Continued

Variable	Description	Item respondents	Item response rate	Item nonresponse rate
B1LNUND	Proficiency of non-English language: understanding speech	10,350	91.20	8.80
B1LNWRIT	Proficiency of non-English language: writing	10,370	91.28	8.72
B1LNWRTH	Undergraduate loan debt a worthwhile investment	10,070	86.28	13.72
B1LOC09	Current school 2009 locale	1,940	88.31	11.69
B1LOC1	First school locale	1,960	89.58	10.42
B1LOGR09	Current, lowest grade taught in 2009	1,370	89.98	10.02
B1LOGR1	First, lowest grade taught	1,290	90.00	10.00
B1LOW09	Current school 2009 lowest grade level offered	2,020	91.79	8.21
B1LOW1	First school lowest grade level offered	2,020	92.44	7.56
B1LVCAR	Why left teaching: dissatisfied with teaching or wanted another career	540	37.55	62.45
B1LVCOND	Why left teaching: workplace conditions	540	37.55	62.45
B1LVOTH	Why left teaching: other reasons	540	37.55	62.45
B1LVPERS	Why left teaching: personal reasons	540	37.55	62.45
B1LVSAL	Why left teaching: inadequate salary/benefits	540	37.55	62.45
B1LVTRSF	Why left teaching: laid off or involuntarily transferred	540	37.55	62.45
B1MACMP	Attained master's degree as of 2009	5,270	95.16	4.84
B1MAIN	Main disability or impairment	1,070	52.65	47.35
B1MAJCHO	Satisfaction with undergraduate major choice	14,540	94.23	5.77
B1MARR	Current marital status	14,900	98.90	1.10
B1MAT09	Currently teach math/computer science in 2009	14,990	99.45	0.55
B1MAT1	First job, taught math/computer science	15,000	99.55	0.45
B1MATH	Taught math or computer science since bachelor's	14,990	99.44	0.56
B1MEMP	Months employed as of 2009	14,280	92.67	7.33
B1MILIT	Military status	14,490	93.81	6.19
B1MISC	Content area certification: miscellaneous	1,390	57.98	42.02
B1MISC09	Currently teach miscellaneous subjects in 2009	14,990	99.45	0.55
B1MISC1	First job, taught miscellaneous subjects	15,000	99.55	0.45
B1MISCD	Taught miscellaneous subjects since bachelor's	14,990	99.44	0.56
B1MOLF	Months out of the labor force as of 2009	14,280	92.67	7.33
B1MORED	Reason didn't apply for a teaching position: needed more education	2,070	71.66	28.34
B1MORMON	Reason didn't apply for a teaching position: didn't offer enough money	2,070	71.66	28.34
B1MOVE	Plan to move into non-teaching job in K-12 education	2,910	52.42	47.58
B1MSPE01	Field of study for first post-bachelor's degree program enrollment	5,210	94.16	5.84
B1MSPE02	Field of study for second post-bachelor's degree program enrollment	810	74.37	25.63
B1MSPE03	Field of study for third post-bachelor's degree program enrollment	110	32.26	67.74
B1MSTR09	Ever enrolled in master's degree program, as of 2009	5,220	94.25	5.75
B1MTGAMT	Monthly rent or mortgage payment amount	10,860	90.50	9.50
B1MTH01	Taught math	1,350	58.18	41.82
B1MUNEM	Months unemployed as of 2009	14,280	92.67	7.33
B1NATIVE	Native language other than English	1,310	55.01	44.99
B1NDGCWK	Non-degree coursework enrollment	14,540	94.14	5.86
B1NF21B2	Second most important reason for working outside bachelor's field	1,540	96.92	3.08
B1NMJBGD	Number of jobs since graduation	13,290	91.91	8.09
B1NOLNG	No second best language	10,790	91.63	8.37
B1NP2YR	Able to complete bachelor's without attending public 2-year institution	5,310	86.27	13.73

See notes at end of table.

Table J-1. Item response rates and nonresponse rates for items collected in the B&B:08/09 interview: 2009—Continued

Variable	Description	Item respondents	Item response rate	Item nonresponse rate
B1NPDEG	Earned undergraduate certificate or associate's degree at bachelor's degree institution	14,530	94.16	5.84
B1NPMJCH	Ever formally changed major at NPSAS	14,830	96.47	3.53
B1NSF11	Foreign citizenship	320	39.39	60.61
B1NSF19B	Job related to major	11,800	93.62	6.38
B1NSF21B	Most important reason for working outside bachelor's field	2,370	98.01	1.99
B1NSF9D	Method of U.S. citizenship	14,150	93.58	6.42
B1NSFCHG	Reason working outside bachelor's field: career change	3,150	80.05	19.95
B1NSFCON	Reason working outside bachelor's field: working conditions	3,150	80.05	19.95
B1NSFFAM	Reason working outside bachelor's field: family-related	3,150	80.05	19.95
B1NSFFLD	Reason working outside bachelor's field: no job in degree field	3,150	80.05	19.95
B1NSFLOC	Reason working outside bachelor's field: job location	3,150	80.05	19.95
B1NSFOFR	Reason working outside bachelor's field: other	3,150	80.05	19.95
B1NSFPAY	Reason working outside bachelor's field: pay/promotion opportunities	3,150	80.05	19.95
B1NTPAY	Reason not currently repaying undergraduate loans	3,990	80.47	19.53
B1NUMJOB	Number of jobs for pay	14,970	99.39	0.61
B1OCC6	Occupation: specific	12,040	98.05	1.95
B1OFFER	Received any offers for teaching positions	370	27.94	72.06
B1OSAM01	Time frame for other school-related income in [REJBTP01] position	380	17.41	82.59
B1OSAM02	Time frame for other school-related income in [REJBTP02] position	80	7.42	92.58
B1OSAM03	Time frame for other school-related income in [REJBTP03] position	10	1.10	98.90
B1OSAM05	Time frame for other school-related income in [REJBTP05] position	#	#	100.00
B1OTH	Taught other subjects since bachelor's	14,990	99.44	0.56
B1OTH09	Currently teach other unspecified subject in 2009	14,990	99.45	0.55
B1OTH1	First job, taught other unspecified subject	15,000	99.55	0.45
B1OTHRSN	Reason didn't apply for a teaching position: other reason	2,070	71.66	28.34
B1OTLANG	Know a language other than English	13,150	93.23	6.77
B1OUTFLD	Primary reason for working outside of bachelor's degree field in 2009	3,190	97.50	2.50
B1PARIL	Household composition: live with parents or in-laws	14,460	93.49	6.51
B1PBENST	Postbaccalaureate degree: enrollment summary	14,860	98.33	1.67
B1PLNTCH	Plan to teach in K–12 classroom in future	50	5.93	94.07
B1PMIN09	Current school 2009 percent minority	1,190	81.96	18.05
B1PMIN1	First school percent minority	1,120	82.69	17.31
B1PNTSUP	Teacher satisfaction: parent support	2,050	67.58	32.42
B1PREF	Reason didn't apply for a teaching position: preferred other career	2,070	71.66	28.34
B1PREFT	Prefer to work more hours	11,790	93.51	6.49
B1PREPAR	Prepared for a teaching career at the K–12 level	12,440	93.80	6.20
B1PRSB09	Current, felt prepared to teach subjects in 2009	2,130	98.35	1.65
B1PSDMY	Date of first post-bachelor's completion as of 2009	5,260	94.87	5.13
B1PUPR09	Current school 2009 sector (public/private)	2,060	94.03	5.97
B1PUPR1	First school sector (public/private)	2,060	94.60	5.40
B1REPAY	Borrowers repayment status for any loans	14,870	98.43	1.57
B1RPYAMT	Monthly undergraduate loan payment	9,400	88.69	11.31
B1RSEMP	Reason for non-degree coursework: current employment	1,720	65.69	34.31
B1RSGOAL	Reason for non-degree coursework: long-term goals	1,720	65.69	34.31
B1RSOTH	Reason for non-degree coursework: other	1,720	65.69	34.31
B1RSPERS	Reason for non-degree coursework: personal enrichment	1,720	65.69	34.31

See notes at end of table.

Table J-1. Item response rates and nonresponse rates for items collected in the B&B:08/09 interview: 2009—Continued

Variable	Description	Item respondents	Item response rate	Item nonresponse rate
B1SCI	Taught science since bachelor's	14,990	99.44	0.56
B1SCI09	Currently teach science in 2009	14,990	99.45	0.55
B1SCI1	First job, taught science	15,000	99.55	0.45
B1SEARCH	Looking for a job	14,530	94.05	5.95
B1SEC09	Currently teach secondary education in 2009	14,990	99.45	0.55
B1SEC1	First job, taught secondary education	15,000	99.55	0.45
B1SECED	Taught secondary education since bachelor's	14,990	99.44	0.56
B1SED09	Currently teach special education in 2009	14,990	99.45	0.55
B1SED1	First job, taught special education	15,000	99.55	0.45
B1SIZE09	Current school 2009 enrollment size (matches B&B 01)	1,210	82.08	17.92
B1SIZE1	First school enrollment size (matches B&B 01)	1,130	82.77	17.23
B1SOACPR	Stopped out because of academic problems	2,960	75.15	24.85
B1SOC	Taught social sciences since bachelor's	14,990	99.44	0.56
B1SOC09	Currently teach social sciences in 2009	14,990	99.45	0.55
B1SOC1	First job, taught social sciences	15,000	99.55	0.45
B1SOCSUP	Teacher satisfaction: relationships with colleagues and supervisors	2,050	67.58	32.42
B1SOENOT	Stopped out to enroll elsewhere	2,960	75.15	24.85
B1SOFAMC	Stopped out because of change in family status	2,970	75.30	24.70
B1SOJBML	Stopped out because of conflict with job or military	2,960	75.17	24.83
B1SOOFIN	Stopped out for other financial reasons	2,960	75.19	24.81
B1SOOTH	Stopped out for another reason	2,960	75.44	24.56
B1SOPERS	Stopped out for personal reasons	2,960	75.23	24.77
B1SOTMOF	Stopped out because needed time off from studying	2,960	75.15	24.85
B1SOWRK	Stopped out because needed to work	2,970	75.27	24.73
B1SPAMT	Spouse's student loan amount	1,540	75.27	24.73
B1SPCOL	Spouse attended college or graduate school in 2008-2009 school year	3,560	90.36	9.64
B1SPECED	Taught special education since bachelor's	14,990	99.44	0.56
B1SPEMP	Spouse employed in 2008	3,610	90.43	9.57
B1SPLN	Spouse had student loans	3,540	89.86	10.14
B1SPLV	Spouse's education level	3,620	90.23	9.77
B1SPNOT	Not married to spouse in 2008	3,430	85.89	14.11
B1SPODP	Household composition: live with spouse or domestic partner	14,460	93.49	6.51
B1SPOWE	Spouse's student loan amount owed	1,570	76.99	23.01
B1SPPAMT	Spouse's monthly payment on student loans in 2009	3,530	88.69	11.31
B1ST09	Current school 2009 state	2,080	95.52	4.48
B1ST1	First school state	2,090	96.14	3.86
B1STCOMP	Completed or now completing student teaching or teacher practicum	1,810	67.84	32.17
B1STDISP	Teacher satisfaction: student discipline	2,050	67.58	32.42
B1STOPOT	Ever stopped out before completing bachelor's degree	14,490	93.86	6.14
B1STRES	State of residence	14,450	93.57	6.43
B1STTC01	Held any other teaching positions after teaching job 1	2,070	67.94	32.06
B1STTC02	Held any other teaching positions after teaching job 2	390	28.96	71.04
B1STTC03	Held any other teaching positions after teaching job 3	60	6.16	93.84
B1STTC04	Held any other teaching positions after teaching job 4	10	0.46	99.54
B1STTC05	Held any other teaching positions after teaching job 5	#	0.17	99.83
B1STTC06	Held any other teaching positions after teaching job 6	#	0.17	99.83
B1STTC07	Held any other teaching positions after teaching job 7	#	0.17	99.83

See notes at end of table.

Table J-1. Item response rates and nonresponse rates for items collected in the B&B:08/09 interview: 2009—Continued

Variable	Description	Item respondents	Item response rate	Item nonresponse rate
B1TCH01	Feel prepared in first teaching job: teach subject matter	1,350	58.01	41.99
B1TCHAPP	Applied for K–12 teaching position since bachelor's degree completion	2,440	74.48	25.52
B1TCHEFF	Teacher satisfaction: effectiveness as a teacher	2,050	67.58	32.42
B1TCHGRT	Aware of TEACH Grant Program	4,510	82.42	17.58
B1TCHNO	Reason didn't apply for a teaching position: did not like teaching	2,070	71.66	28.34
B1TEACH	Teaching status	14,590	94.63	5.37
B1TFP09	Current, teach full- or part-time in 2009	2,090	95.68	4.32
B1TFP1	First, taught full- or part-time	2,090	96.26	3.74
B1TIMOFF	Time before current job offer	6,940	88.46	11.54
B1TTLI09	Current school 2009 Title I eligible	2,020	92.57	7.43
B1TYP09	Current school 2009 type	1,940	88.33	11.67
B1UNEMSP	Number of unemployment spells as of 2009	14,280	92.67	7.33
B1VLCHUR	Volunteer type: service to a church or other religious organization	6,290	85.75	14.25
B1VLCOM	Volunteer type: service to the community	6,290	85.75	14.25
B1VLFUND	Volunteer type: fundraising (political and non-political)	6,290	85.75	14.25
B1VLFUT	Likely to continue volunteering in next 12 months	6,290	85.83	14.17
B1VLHEAL	Volunteer type: health services, hospital, nursing home or group home	6,290	85.75	14.25
B1VLKIDS	Volunteer type: other work with kids	6,290	85.75	14.25
B1VLNBRH	Volunteer type: neighborhood improvement	6,290	85.75	14.25
B1VLNON	Volunteer type: service to nonprofit organizations	6,290	85.75	14.25
B1VLONE	One time volunteer event	6,260	85.49	14.51
B1VLOTH	Volunteer type: other service not listed	6,290	85.75	14.25
B1VLSOUP	Volunteer type: homeless shelter or soup kitchen	6,290	85.75	14.25
B1VLTUT	Volunteer type: tutoring/education-related	6,290	85.75	14.25
B1VOC	Taught vocational education since bachelor's	14,990	99.44	0.56
B1VOC09	Currently teach vocational/career/technical in 2009	14,990	99.45	0.55
B1VOC1	First job, taught vocational/career/technical	15,000	99.55	0.45
B1VOTE	Registered to vote	14,490	93.73	6.27
B1VYHRS	Number of hours volunteered in 2008–09	5,450	89.93	10.07
B1WRK12M	Employed since graduating with bachelor's degree	14,950	98.96	1.04
B1WRKHRS	Hours worked weekly while enrolled	1,620	83.51	16.49
B1WRKS	Primarily a student or employee while enrolled	2,500	91.05	8.95
BACMPMY	Bachelor's completion date	14,430	94.86	5.14
BAMJCIP	Primary bachelor's major CIP code	15,050	99.99	0.01
DOBMY	Date of birth	15,050	99.98	0.02
H1OTHDEG	Highest degree attained before bachelor's	15,040	99.92	0.08
HSMY	Date of high school completion	14,700	95.82	4.18
I1CTRL	First postsecondary institution control	14,480	99.92	0.08
I1LEVEL	First postsecondary institution level	14,480	99.93	0.07
PSE_DATE	Date of first postsecondary enrollment	14,980	99.54	0.46

Rounds to zero.

NOTE: Detail may not sum to totals because of rounding. The item response rates and nonresponse rates were computed using the B&B:08/09 interview analysis weight. The response rate is computed as the number of cases who responded to the item and did not have a legitimate skip for the item divided by the number of cases who did not have a legitimate skip for the item.

ESL = English as a Second Language. CIP = Classification of Instructional Programs. NPSAS = National Postsecondary Student Aid Study. TEACH = Teacher Education Assistance for College and Higher Education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond (B&B:08/09).

Table J-2. Mean values of continuous variables before and after imputation, B&B:08/09: 2009

Variable	Description	Mean before imputation	Mean after imputation	Difference	Percent relative difference
B1CARPAY	Car payment amount	148.65	148.52	0.13	0.09
B1CURHRS	Hours worked weekly	40.25	40.22	0.03	0.07
B1DAGE	Age of youngest dependent	7.25	7.21	0.05	0.65
B1ENR09	Current school 2009 enrollment K–12	714.78	721.61	-6.83	-0.95
B1ENR1	First school enrollment K–12	720.41	718.73	1.68	0.23
B1ERNAMT	Amount earned from job	21,758.07	21,816.52	-58.45	-0.27
B1FRPL09	Current school 2009 percent free or reduced price lunch eligible	47.37	47.96	-0.59	-1.25
B1FRPL1	First school percent free or reduced price lunch eligible	48.54	48.78	-0.25	-0.51
B1INCSP	Spouse's income in 2008	35,656.04	35,607.17	48.87	0.14
B1JBIC01	Base salary in [REJBTP01] position	20,261.96	18,548.18	1,713.78	8.46
B1JBIC02	Base salary in [REJBTP02] position	21,769.96	22,234.56	-464.61	-2.13
B1JBIC03	Base salary in [REJBTP03] position	24,429.91	25,387.99	-958.08	-3.92
B1JBIC04	Base salary in [REJBTP04] position	10,579.19	10,643.92	-64.72	-0.61
B1JBOS01	Other school-related income while in [REJBTP01] position	667.17	576.21	90.96	13.63
B1JBOS02	Other school-related income while in [REJBTP02] position	672.96	642.93	30.04	4.46
B1JBOS03	Other school-related income while in [REJBTP03] position	329.31	272.95	56.36	17.11
B1LANGS	Best-known second language	18.78	18.81	-0.02	-0.13
B1MSPE01	Field of study for first post-bachelor's degree program enrollment	33.82	33.93	-0.11	-0.34
B1MSPE02	Field of study for second post-bachelor's degree program enrollment	32.75	32.80	-0.04	-0.14
B1MSPE03	Field of study for third post-bachelor's degree program enrollment	35.12	34.91	0.22	0.61
B1MTGAMT	Monthly rent or mortgage payment amount	815.11	809.55	5.57	0.68
B1NATIVE	Native language other than English	33.60	33.86	-0.27	-0.79
B1NSF11	Foreign citizenship	286.01	287.15	-1.14	-0.40
B1OCC6	Occupation: specific	277,735.36	277,799.02	-63.66	-0.02
B1PMIN09	Current school 2009 percent minority	45.62	46.37	-0.75	-1.64
B1PMIN1	First school percent minority	46.47	47.29	-0.82	-1.77
B1PSDMY	Date of first post-bachelor's completion as of 2009	24,064.48	23,878.86	185.62	0.77
B1RPYAMT	Monthly undergraduate loan payment	182.94	181.49	1.45	0.79
B1SIZE09	Current school 2009 enrollment size (matches B&B 2000/01)	724.48	731.24	-6.76	-0.93
B1SIZE1	First school enrollment size (matches B&B 2000/01)	730.26	728.33	1.93	0.26
B1SPAMT	Spouse's student loan amount	26,317.48	25,720.41	597.06	2.27
B1SPOWE	Spouse's student loan amount owed	19,870.99	18,685.73	1,185.26	5.96
B1SPPAMT	Spouse's monthly payment on student loans in 2009	57.41	57.48	-0.08	-0.13
B1ST09	Current school 2009 state	18.16	18.44	-0.28	-1.56
B1ST1	First school state	17.00	17.25	-0.25	-1.45
B1STRES	State of residence	26.11	26.07	0.04	0.15
B1TIMOFF	Time before current job offer	10.69	10.56	0.13	1.22
B1VYHRS	Number of hours volunteered in 2008–09	167.93	169.68	-1.75	-1.04
B1WRKHRS	Hours worked weekly while enrolled	24.38	25.08	-0.70	-2.87
BAMJCIP	Primary bachelor's major CIP code	35.97	35.96	#	0.01

Rounds to zero.

NOTE: Means were computed using the B&B:08/09 interview analysis weight. Cases with legitimate skips for the item are not included in the estimated means. The difference is computed as the mean before imputation minus the mean after imputation. B&B:01 = 2000–2001 Baccalaureate and Beyond Longitudinal Study. CIP = Classification of Instructional Programs.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond (B&B:08/09).

Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1ADMSUP	Teacher satisfaction: administrative support	0	22.44	22.11	0.33	1.47
		1	77.56	77.89	-0.33	-0.42
B1ALONE	Household composition: live alone	0	82.03	82.00	0.03	0.04
		1	17.97	18.00	-0.03	-0.17
B1APCOMP	Reason didn't apply for a teaching position: difficult application	0	95.24	94.64	0.60	0.63
		1	4.76	5.36	-0.60	-12.67
B1APRLFP	Labor force participation in April 2009	1	83.01	83.37	-0.36	-0.43
		2	7.05	6.78	0.27	3.77
		3	9.94	9.85	0.09	0.92
B1ART	Taught art since bachelor's	0	98.94	98.93	0.01	0.01
		1	1.06	1.07	-0.01	-0.53
B1ART09	Currently teach arts/music in 2009	0	99.08	99.06	0.02	0.02
		1	0.92	0.94	-0.02	-1.68
B1ART1	First job, taught arts/music	0	99.04	99.03	0.01	0.01
		1	0.96	0.97	-0.01	-0.75
B1BRLN	Income-based repayment in 2009	0	90.99	90.90	0.09	0.10
		1	9.01	9.10	-0.09	-0.96
B1CARIND	Job part of a career in industry	0	16.34	16.58	-0.23	-1.43
		1	83.66	83.42	0.23	0.28
B1CART	Content area certification: arts and music	0	91.61	92.00	-0.39	-0.43
		1	8.39	8.00	0.39	4.66
B1CENGL	Content area certification: English or language arts	0	88.43	88.76	-0.33	-0.37
		1	11.57	11.24	0.33	2.84
B1CESL	Content area certification: English as a second language	0	96.16	96.15	#	#
		1	3.84	3.85	#	-0.06
B1CFLNG	Content area certification: foreign languages	0	96.91	96.85	0.06	0.06
		1	3.09	3.15	-0.06	-2.01
B1CGENA	Content area certification: elementary education	0	48.29	48.25	0.04	0.08
		1	51.71	51.75	-0.04	-0.07
B1CGENB	Content area certification: secondary education	0	76.45	76.97	-0.52	-0.68
		1	23.55	23.03	0.52	2.19
B1CHELTH	Content area certification: health/physical education	0	92.76	92.14	0.62	0.67
		1	7.24	7.86	-0.62	-8.53

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1CITZN	U.S. citizenship status	1	97.30	97.38	-0.08	-0.08
		2	1.83	1.78	0.05	2.62
		3	0.87	0.85	0.03	3.15
B1CLSIZE	Teacher satisfaction: class size	0	22.42	21.72	0.71	3.15
		1	77.58	78.28	-0.71	-0.91
B1CMATH	Content area certification: math or computer science	0	90.43	90.24	0.19	0.21
		1	9.57	9.76	-0.19	-2.00
B1CMNT01	Receive help in first teaching job: working with parents/community	0	32.15	32.48	-0.33	-1.01
		1	67.85	67.52	0.33	0.48
B1COBEN	Undergraduate education worth the financial cost	0	23.66	23.74	-0.08	-0.32
		1	76.34	76.26	0.08	0.10
B1COMSRV	Volunteered in last 12 months	0	59.10	59.10	#	-0.01
		1	40.90	40.90	#	0.01
B1COTHER	Content area certification: other	0	92.32	92.42	-0.10	-0.11
		1	7.68	7.58	0.10	1.30
B1CRELOC	Live more than 50 miles from NPSAS	0	50.23	50.01	0.22	0.43
		1	49.77	49.99	-0.22	-0.44
B1CSCIEN	Content area certification: natural sciences	0	93.86	93.45	0.41	0.43
		1	6.14	6.55	-0.41	-6.64
B1CSOSCI	Content area certification: social sciences	0	88.13	88.16	-0.02	-0.03
		1	11.87	11.84	0.02	0.20
B1CSPCED	Content area certification: special education	0	89.87	89.49	0.38	0.42
		1	10.13	10.51	-0.38	-3.71
B1CURCAR	Job description: exploring career options	0	67.25	66.87	0.38	0.56
		1	32.75	33.13	-0.38	-1.15
B1CURCRT	Certified to teach at the K–12 level	0	58.89	58.28	0.61	1.04
		1	41.11	41.72	-0.61	-1.49
B1CUREDU	Job description: working to prepare for further education	0	78.63	79.25	-0.62	-0.79
		1	21.37	20.75	0.62	2.90
B1CUREST	Job description: continuing in job held before [NPSAS] graduation	0	84.56	84.48	0.09	0.11
		1	15.44	15.52	-0.09	-0.58
B1CURFUT	Job description: deciding on future education/career	0	59.69	59.08	0.61	1.02
		1	40.31	40.92	-0.61	-1.51

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1CURINT	Job description: job while pursuing other interests	0	67.75	67.44	0.32	0.47
		1	32.25	32.56	-0.32	-0.99
B1CUROTH	Job description: other	0	90.31	89.91	0.39	0.44
		1	9.69	10.09	-0.39	-4.06
B1CURPAY	Job description: just paying the bills	0	52.89	53.49	-0.60	-1.13
		1	47.11	46.51	0.60	1.26
B1CURSCH	Job description: job while in school	0	42.84	44.53	-1.69	-3.93
		1	57.16	55.47	1.69	2.95
B1CVOCTC	Content area certification: vocational/career/technical education	0	98.00	98.08	-0.09	-0.09
		1	2.00	1.92	0.09	4.32
B1DEP2	Number of dependents	0	83.51	83.27	0.23	0.28
		1	8.22	8.36	-0.14	-1.67
		2	5.29	5.36	-0.07	-1.29
		3	2.07	2.13	-0.06	-2.88
		4	0.63	0.59	0.03	5.01
		5	0.19	0.20	#	-2.53
		6	0.09	0.08	0.01	6.34
B1DEPS	Any dependents	0	83.45	83.27	0.17	0.21
		1	16.55	16.73	-0.17	-1.04
B1DISC01	Receive help in first teaching job: disciplining students	0	22.91	23.62	-0.71	-3.10
		1	77.09	76.38	0.71	0.92
B1DISMOB	Disability: mobility impairment	0	98.31	98.29	0.02	0.02
		1	1.69	1.71	-0.02	-1.19
B1DISOTH	Disability: other	0	93.98	93.94	0.05	0.05
		1	6.02	6.06	-0.05	-0.77
B1DISSEN	Disability: sensory impairment	0	98.84	98.83	0.01	0.01
		1	1.16	1.17	-0.01	-0.77
B1DPNTS	Household composition: live with children or dependents	0	87.03	86.81	0.22	0.25
		1	12.97	13.19	-0.22	-1.69
B1DSCP01	Feel prepared in first teaching job: classroom management	0	23.73	23.93	-0.20	-0.86
		1	76.27	76.07	0.20	0.27

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1EARNT	Time frame for earnings	1	47.03	47.25	-0.22	-0.47
		2	8.71	8.69	0.02	0.19
		3	8.66	8.62	0.03	0.40
		4	5.88	5.92	-0.04	-0.66
		5	1.19	1.17	0.02	1.51
		6	28.54	28.35	0.19	0.66
B1EE09	Currently teach elementary education in 2009	0	96.87	96.71	0.16	0.17
		1	3.13	3.29	-0.16	-5.23
B1EE1	First job, taught elementary education	0	96.97	96.82	0.15	0.16
		1	3.03	3.18	-0.15	-4.98
B1ELED	Taught elementary education since bachelor's	0	96.66	96.48	0.18	0.18
		1	3.34	3.52	-0.18	-5.30
B1EMPDIS	Reason not working for pay: disabled	0	96.32	96.23	0.09	0.09
		1	3.68	3.77	-0.09	-2.37
B1EMPHM	Reason not working for pay: homemaker	0	79.24	78.16	1.08	1.36
		1	20.76	21.84	-1.08	-5.20
B1EMPHX	Employment history since graduation as of 2009	1	38.78	39.18	-0.40	-1.03
		2	0.70	0.65	0.05	7.09
		3	2.89	2.97	-0.07	-2.52
		4	19.29	19.48	-0.19	-0.98
		5	15.20	14.81	0.38	2.52
		6	2.23	2.15	0.07	3.30
		7	20.90	20.75	0.15	0.74
B1EMPLI	Employer offers benefits: life insurance	0	40.84	41.15	-0.31	-0.76
		1	59.16	58.85	0.31	0.53
B1EMPMI	Employer offers benefits: medical or health insurance	0	23.75	23.58	0.17	0.73
		1	76.25	76.42	-0.17	-0.23
B1EMPOTH	Employer offers benefits: other	0	66.88	67.19	-0.30	-0.45
		1	33.12	32.81	0.30	0.92
B1EMPRB	Employer offers benefits: retirement or other financial benefits	0	33.24	33.24	#	0.01
		1	66.76	66.76	#	#
B1EMPRT	Employed full-time or part-time	1	78.89	79.16	-0.27	-0.34
		2	21.11	20.84	0.27	1.29
B1EMPTMP	Reason not working for pay: waiting to report to work or layoff	0	86.33	86.27	0.06	0.06
		1	13.67	13.73	-0.06	-0.41

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1EMPTRV	Reason not working for pay: traveling	0	91.18	90.81	0.36	0.40
		1	8.82	9.19	-0.36	-4.14
B1EMPTYP	Type of employer	1	4.72	4.93	-0.20	-4.33
		2	55.01	54.59	0.42	0.76
		3	14.38	14.50	-0.12	-0.84
		4	15.73	15.93	-0.19	-1.23
		5	1.85	1.87	-0.01	-0.71
		6	2.21	2.11	0.10	4.42
		7	6.09	6.08	0.02	0.26
B1EMPVOL	Reason not working for pay: volunteering	0	94.25	94.08	0.17	0.19
		1	5.75	5.92	-0.17	-3.04
B1ENG	Taught English since bachelor's	0	98.59	98.43	0.16	0.16
		1	1.41	1.57	-0.16	-11.15
B1ENG09	Currently teach English/language arts in 2009	0	98.68	98.54	0.15	0.15
		1	1.32	1.46	-0.15	-11.17
B1ENG1	First job, taught English/language arts	0	98.79	98.67	0.12	0.12
		1	1.21	1.33	-0.12	-9.72
B1ENGL	English as native language	0	8.14	7.64	0.50	6.10
		1	91.86	92.36	-0.50	-0.54
B1ENIN09	Enrollment intensity in 2009	0	79.21	78.25	0.96	1.21
		1	14.62	15.38	-0.76	-5.23
		2	4.65	4.80	-0.16	-3.39
		3	1.52	1.56	-0.04	-2.58
B1ENRST	Enrollment status in 2009	0	30.18	30.11	0.07	0.25
		1	1.69	1.71	-0.02	-1.19
		2	1.44	1.51	-0.08	-5.23
		3	2.25	2.39	-0.14	-6.07
		4	3.33	3.55	-0.22	-6.54
		5	45.37	44.98	0.40	0.87
		6	0.39	0.37	0.02	5.12
		7	10.49	10.73	-0.24	-2.29
B1ESL	Taught ESL since bachelor's	0	99.38	99.36	0.02	0.02
		1	0.62	0.64	-0.02	-3.21
B1ESL09	Currently teach ESL in 2009	0	99.40	99.38	0.02	0.02
		1	0.60	0.62	-0.02	-2.65
B1ESL1	First job, taught ESL	0	99.39	99.37	0.02	0.02
		1	0.61	0.63	-0.02	-3.39

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1EVRTCH	Taught grades K–12 since graduating from NPSAS	0	86.39	86.43	-0.04	-0.04
		1	13.61	13.57	0.04	0.28
B1EVRVT	Ever voted in an election	0	12.42	12.55	-0.13	-1.07
		1	87.58	87.45	0.13	0.15
B1EXPAP	Academic experiences at NPSAS: placed on academic probation	0	91.75	91.80	-0.05	-0.06
		1	8.25	8.20	0.05	0.63
B1EXPDL	Academic experiences at NPSAS: placed on Dean's List	0	36.20	36.05	0.15	0.42
		1	63.80	63.95	-0.15	-0.24
B1EXPGH	Academic experiences at NPSAS: graduated with academic honors	0	59.83	59.90	-0.08	-0.13
		1	40.17	40.10	0.08	0.19
B1EXPIN	Academic experiences at NPSAS: received an incomplete grade	0	90.50	90.48	0.02	0.02
		1	9.50	9.52	-0.02	-0.24
B1EXPRP	Academic experiences at NPSAS: repeated course for higher grade	0	75.85	75.92	-0.08	-0.10
		1	24.15	24.08	0.08	0.32
B1EXPWD	Academic experiences at NPSAS: withdrew from course	0	73.48	73.38	0.11	0.15
		1	26.52	26.62	-0.11	-0.40
B1FAM	Reason didn't apply for a teaching position: personal reasons	0	90.22	90.59	-0.37	-0.41
		1	9.78	9.41	0.37	3.81
B1FINBLO	Postbaccalaureate financial aid type: private education/bank loans	0	86.38	86.51	-0.12	-0.14
		1	13.62	13.49	0.12	0.92
B1FINETR	Postbaccalaureate financial aid type: employer tuition assistance	0	94.02	94.02	-0.01	-0.01
		1	5.98	5.98	0.01	0.11
B1FINFEL	Postbaccalaureate financial aid type: fellowships	0	96.23	96.26	-0.04	-0.04
		1	3.77	3.74	0.04	0.95
B1FINGR	Postbaccalaureate financial aid type: grants or scholarships	0	77.15	77.25	-0.10	-0.13
		1	22.85	22.75	0.10	0.44
B1FINNON	Postbaccalaureate financial aid type: none	0	78.28	78.58	-0.30	-0.39
		1	21.72	21.42	0.30	1.39
B1FINOGA	Postbaccalaureate financial aid type: other graduate assistantship	0	94.85	94.85	0.00	0.00
		1	5.15	5.15	0.00	0.00
B1FINOTH	Postbaccalaureate financial aid type: other	0	94.80	94.81	-0.02	-0.02
		1	5.20	5.19	0.02	0.29
B1FINPL	Postbaccalaureate financial aid type: personal loan or gift	0	89.30	89.40	-0.09	-0.10
		1	10.70	10.60	0.09	0.87

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1FINRA	Postbaccalaureate financial aid type: research assistantship	0	95.67	95.78	-0.11	-0.11
		1	4.33	4.22	0.11	2.47
B1FINTA	Postbaccalaureate financial aid type: teaching assistantship	0	93.83	93.88	-0.05	-0.05
		1	6.17	6.12	0.05	0.81
B1FL09	Currently teach foreign languages in 2009	0	99.62	99.62	#	#
		1	0.38	0.38	#	0.55
B1FL1	First job, taught foreign languages	0	99.67	99.67	#	#
		1	0.33	0.33	#	0.45
B1FLN	Taught foreign language since bachelor's	0	99.58	99.58	#	#
		1	0.42	0.42	#	0.56
B1FOR09	Current school 2009 was a foreign school	0	32.41	30.98	1.43	4.42
		1	4.05	3.95	0.10	2.35
		2	63.54	65.07	-1.53	-2.40
B1FOR1	First school taught was a foreign school	0	37.06	35.65	1.41	3.79
		1	4.03	3.96	0.07	1.71
		2	58.91	60.39	-1.47	-2.50
B1FUTENR	Expect to pursue degree or certificate in future	1	35.62	35.89	-0.27	-0.76
		2	41.25	41.24	0.01	0.03
		3	19.96	19.69	0.26	1.33
		4	3.18	3.18	-0.01	-0.24
B1GR1CON	First postbaccalaureate institution control	0	1.27	1.30	-0.02	-1.88
		1	58.26	58.29	-0.02	-0.04
		2	34.21	34.02	0.19	0.55
		3	6.25	6.39	-0.14	-2.27
B1GR1DG	First post-bachelor's degree type enrollment, as of 2009	1	4.23	4.36	-0.13	-3.10
		2	2.51	2.56	-0.05	-2.03
		3	3.60	3.69	-0.09	-2.43
		4	7.36	7.48	-0.12	-1.68
		5	62.86	62.28	0.58	0.93
		6	0.65	0.61	0.04	5.63
		7	13.24	13.66	-0.42	-3.17
		8	5.55	5.35	0.19	3.49
B1GR1LEV	First post-bachelor's institution level	0	1.28	1.30	-0.02	-1.80
		1	90.35	89.82	0.53	0.59
		2	5.97	6.30	-0.34	-5.64
		3	2.40	2.58	-0.18	-7.29
B1GRE	Took graduate or professional entrance exam	0	85.98	85.76	0.22	0.26
		1	14.02	14.24	-0.22	-1.59

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1GRFUTR	Future post-baccalaureate enrollment in 2009	0	69.94	68.89	1.05	1.51
		1	3.49	3.59	-0.10	-2.94
		2	26.57	27.52	-0.95	-3.58
B1HIDEG	Highest degree attained as of 2009	1	97.05	97.04	0.01	0.01
		2	0.72	0.73	-0.01	-1.23
		3	2.01	2.01	#	0.04
		4	0.07	0.07	#	0.04
		5	0.15	0.15	#	-2.15
		6	0.00	0.00	#	0.04
B1HIENR	Highest post-BA enrollment as of 2009	0	69.08	68.89	0.20	0.29
		1	1.27	1.30	-0.02	-1.96
		2	0.78	0.78	#	0.29
		3	1.10	1.11	-0.01	-0.80
		4	2.11	2.15	-0.04	-2.05
		5	19.29	19.38	-0.08	-0.44
		6	0.25	0.25	#	0.29
		7	4.35	4.40	-0.04	-1.03
B1HIGH09	Current school 2009 highest grade level offered	0	33.68	30.98	2.70	8.01
		1	0.38	0.54	-0.16	-41.28
		2	0.53	0.72	-0.19	-35.05
		3	0.80	0.78	0.02	3.05
		4	1.73	1.90	-0.18	-10.30
		5	14.66	15.42	-0.76	-5.21
		6	5.23	5.29	-0.06	-1.22
		7	0.72	0.84	-0.12	-16.84
		8	14.31	14.73	-0.42	-2.92
		9	1.13	1.04	0.09	7.94
B1HIGH09	Current school 2009 highest grade level offered	10	0.43	0.42	0.01	1.92
		11	0.64	0.65	-0.01	-2.01
		12	22.84	23.81	-0.96	-4.22
		13	0.31	0.40	-0.09	-29.91
		14	0.61	0.56	0.05	8.01
		15	1.50	1.46	0.05	3.12
B1HIGH1	First school highest grade level offered	16	0.50	0.46	0.04	8.01
		0	38.49	35.65	2.84	7.37
		1	0.39	0.55	-0.16	-40.98
		2	0.45	0.41	0.03	7.37
		3	0.70	0.69	0.01	1.71
		4	1.60	1.80	-0.20	-12.41
		5	13.97	15.00	-1.03	-7.36
		6	5.31	5.43	-0.12	-2.34
		7	1.01	1.12	-0.10	-10.16
8	13.33	13.71	-0.38	-2.83		
9	1.26	1.28	-0.01	-1.16		

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1HIGH1	First school highest grade level offered —Continued	10	0.34	0.31	0.02	7.37
		11	0.51	0.48	0.03	5.68
		12	20.20	21.12	-0.92	-4.54
		13	0.24	0.34	-0.10	-41.07
		14	0.54	0.50	0.04	7.37
		15	1.35	1.32	0.03	1.91
		16	0.30	0.28	0.02	7.37
B1HIGR09	Current, highest grade taught in 2009	0	5.51	5.27	0.23	4.24
		1	4.63	4.30	0.33	7.22
		2	5.39	5.54	-0.15	-2.80
		3	5.11	5.05	0.06	1.26
		4	6.23	6.25	-0.02	-0.32
		5	8.37	8.64	-0.27	-3.25
		6	7.30	7.16	0.13	1.82
		7	4.61	5.31	-0.70	-15.17
		8	12.03	12.04	-0.01	-0.07
		9	2.84	3.06	-0.22	-7.74
		10	4.05	3.87	0.18	4.36
		11	3.78	3.58	0.20	5.25
		12	25.46	25.68	-0.22	-0.87
13	4.70	4.25	0.45	9.60		
B1HIGR1	First, highest grade taught	0	5.27	4.95	0.32	6.02
		1	4.30	3.98	0.33	7.60
		2	4.95	5.57	-0.62	-12.44
		3	5.73	5.64	0.09	1.56
		4	6.23	6.34	-0.11	-1.73
		5	7.99	8.21	-0.21	-2.67
		6	7.57	7.49	0.08	1.04
		7	4.53	5.54	-1.01	-22.17
		8	13.01	13.01	-0.01	-0.05
B1HIGR1	First, highest grade taught	10	4.02	3.85	0.17	4.16
		11	4.62	4.36	0.26	5.70
		12	24.30	23.82	0.48	1.96
		13	4.36	3.94	0.41	9.48
B1HOTH	Household composition: someone not listed	0	74.68	74.84	-0.17	-0.22
		1	25.32	25.16	0.17	0.65
B1HOUSE	Own home and/or pay rent	0	25.15	24.63	0.52	2.06
		1	21.40	20.20	1.20	5.62
		2	52.22	53.76	-1.54	-2.94
		3	1.23	1.41	-0.18	-14.90
B1HPE	Taught health or physical education since bachelor's	0	99.21	99.19	0.02	0.02
		1	0.79	0.81	-0.02	-2.89

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1HPE09	Currently teach health/physical education in 2009	0	99.32	99.30	0.02	0.02
		1	0.68	0.70	-0.02	-2.92
B1HPE1	First job, taught health/physical education	0	99.30	99.29	0.01	0.01
		1	0.70	0.71	-0.01	-2.11
B1HRELOC	Live more than 50 miles from high school	0	54.17	53.86	0.30	0.56
		1	45.83	46.14	-0.30	-0.66
B1ICAM01	Time frame for base salary in [REJBTP01] position	1	63.81	62.54	1.27	1.99
		2	11.87	12.28	-0.41	-3.48
		3	5.48	5.61	-0.14	-2.50
		4	0.93	1.23	-0.30	-31.88
		5	8.76	8.91	-0.15	-1.68
		6	9.15	9.43	-0.28	-3.05
B1ICAM02	Time frame for base salary in [REJBTP02] position	1	64.36	66.78	-2.42	-3.77
		2	9.97	8.22	1.75	17.57
		3	2.88	2.14	0.74	25.68
		4	1.53	1.42	0.11	7.50
		5	12.20	12.32	-0.12	-0.99
		6	9.06	9.12	-0.06	-0.69
B1ICAM03	Time frame for base salary in [REJBTP03] position	1	65.31	69.53	-4.22	-6.47
		2	4.09	4.33	-0.25	-6.03
		3	1.30	0.95	0.35	26.86
		4	0.46	0.33	0.12	26.86
		5	9.89	9.16	0.73	7.35
		6	18.96	15.69	3.27	17.25
B1ICAM04	Time frame for base salary in [REJBTP04] position	1	22.68	22.84	-0.15	-0.68
		2	19.54	19.51	0.04	0.20
		3	21.29	21.25	0.04	0.20
		5	36.48	36.41	0.07	0.20
B1INCHO	Satisfaction with quality of education at NPSAS	0	7.37	7.33	0.04	0.60
		1	92.63	92.67	-0.04	-0.05
B1IND01	Participated in formal teacher induction program in first teaching job	0	40.06	39.72	0.35	0.86
		1	59.94	60.28	-0.35	-0.58
B1INT01	Participated in teacher internship program in first teaching job	0	76.87	76.90	-0.03	-0.04
		1	23.13	23.10	0.03	0.12
B1INVR01	Feel prepared in first teaching job: instructional methods	0	14.34	14.20	0.14	1.01
		1	85.66	85.80	-0.14	-0.17
B1JBCR01	Currently working in teaching job 1	0	43.23	43.73	-0.51	-1.18
		1	56.77	56.27	0.51	0.90

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1JBCR02	Currently working in teaching job 2	0	29.10	28.10	1.00	3.43
		1	70.90	71.90	-1.00	-1.41
B1JBCR03	Currently working in teaching job 3	0	14.17	12.91	1.26	8.90
		1	85.83	87.09	-1.26	-1.47
B1JBCR04	Currently working in teaching job 4	0	36.61	36.61	#	#
		1	63.39	63.39	#	#
B1JBCR05	Currently working in teaching job 5	0	99.45	99.45	#	#
		1	0.55	0.55	#	#
B1JBIMPO	Challenge satisfaction	0	29.11	29.33	-0.23	-0.78
		1	70.89	70.67	0.23	0.32
B1JBOVER	Overall satisfaction	0	27.69	27.88	-0.18	-0.66
		1	72.31	72.12	0.18	0.25
B1JBPAY	Salary satisfaction	0	44.17	44.17	#	-0.01
		1	55.83	55.83	#	0.01
B1JBSECR	Job security satisfaction	0	26.49	26.75	-0.26	-0.98
		1	73.51	73.25	0.26	0.35
B1JBTP01	Type of K–12 teaching position 1	1	43.60	43.50	0.10	0.22
		2	0.97	0.93	0.04	4.59
		3	2.46	2.50	-0.04	-1.72
		4	8.22	8.07	0.16	1.90
		5	23.06	23.39	-0.33	-1.44
		6	7.89	8.15	-0.26	-3.25
		7	3.43	3.27	0.16	4.59
		8	10.37	10.19	0.17	1.69
B1JBTP02	Type of K–12 teaching position 2	1	58.03	59.92	-1.88	-3.25
		2	1.80	1.65	0.15	8.45
		3	1.79	1.63	0.15	8.45
		4	7.56	6.93	0.64	8.45
		5	8.68	8.37	0.31	3.63
		6	10.96	11.05	-0.09	-0.78
		7	1.95	1.79	0.17	8.45
		8	9.22	8.67	0.55	5.94
B1JBTP03	Type of K–12 teaching position 3	1	70.55	73.17	-2.62	-3.71
		4	7.40	6.74	0.66	8.90
		5	6.39	5.82	0.57	8.90
		6	10.58	9.64	0.94	8.90
		7	0.03	0.02	0.00	8.90
		8	5.06	4.61	0.45	8.90

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1JBTP04	Type of K–12 teaching position 4	1	42.14	42.14	#	#
		5	0.20	0.20	#	#
		6	57.66	57.66	#	#
B1JBTP05	Type of K–12 teaching position 5	5	99.45	99.45	#	#
		8	0.55	0.55	#	#
B1JSTAT	Working for pay	0	16.16	16.15	0.01	0.05
		1	83.84	83.85	-0.01	-0.01
B1LEV09	Current school 2009 level	0	33.93	30.98	2.95	8.69
		1	37.46	39.10	-1.64	-4.39
		2	19.58	19.87	-0.28	-1.45
		3	9.03	10.05	-1.02	-11.31
B1LGCAR	Currently use non-English language in career	0	80.06	80.25	-0.19	-0.23
		1	19.94	19.75	0.19	0.94
B1LNEDU	Undergraduate loan debt influenced employment: work instead of school	0	57.37	57.86	-0.49	-0.85
		1	42.63	42.14	0.49	1.14
B1LNFGN	Loan payments: paid through a loan forgiveness program	0	90.07	90.21	-0.14	-0.16
		1	9.93	9.79	0.14	1.43
B1LNFRGV	Aware of teacher loan forgiveness programs	0	68.20	68.32	-0.12	-0.17
		1	31.80	31.68	0.12	0.36
B1LNGCLS	Last time a non-English language class was taken	0	8.64	8.36	0.28	3.20
		1	15.37	15.45	-0.08	-0.51
		2	37.33	37.55	-0.22	-0.58
		3	38.05	38.06	-0.01	-0.02
		4	0.61	0.58	0.03	4.26
B1LNGCUR	Regularly interact with others in non-English language	0	73.81	74.08	-0.26	-0.36
		1	26.19	25.92	0.26	1.00
B1LNGPLN	Plan to use non-English language in career	0	62.59	62.63	-0.04	-0.06
		1	37.41	37.37	0.04	0.10
B1LNGPST	Frequency of non-English language spoken at home	0	73.36	73.96	-0.60	-0.81
		1	14.57	14.42	0.15	1.02
		2	12.07	11.62	0.45	3.71
B1LNHLP	Loan payments: paid by family or friends	0	88.49	88.62	-0.13	-0.14
		1	11.51	11.38	0.13	1.10
B1LNINCT	Teacher loan forgiveness programs influential	0	86.77	87.00	-0.23	-0.27
		1	13.23	13.00	0.23	1.75

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1LNINFL	Undergraduate loan debt influenced employment plans	0	53.43	53.99	-0.56	-1.05
		1	46.57	46.01	0.56	1.20
B1LNINHR	Undergraduate loan debt influenced employment: had to work more hours	0	65.51	66.00	-0.49	-0.74
		1	34.49	34.00	0.49	1.41
B1LNINJB	Undergraduate loan debt influenced employment: took less desirable job	0	61.17	61.54	-0.37	-0.60
		1	38.83	38.46	0.37	0.94
B1LNINMR	Undergraduate loan debt influenced employment: more than one job	0	73.76	73.43	0.33	0.45
		1	26.24	26.57	-0.33	-1.26
B1LNINOT	Undergraduate loan debt influenced employment: other reasons	0	66.40	65.81	0.59	0.88
		1	33.60	34.19	-0.59	-1.75
B1LNINST	Undergraduate loan debt influenced employment: took job outside field	0	63.14	63.19	-0.05	-0.08
		1	36.86	36.81	0.05	0.14
B1LNPRT	Participated in teacher loan forgiveness program	0	93.43	92.79	0.63	0.68
		1	6.57	7.21	-0.63	-9.64
B1LNREAD	Proficiency of non-English language: reading	1	5.32	5.24	0.09	1.64
		2	11.70	11.60	0.09	0.81
		3	60.10	60.12	-0.02	-0.04
		4	22.88	23.04	-0.16	-0.68
B1LNSPEK	Proficiency of non-English language: speaking	1	5.78	5.54	0.24	4.10
		2	11.31	10.95	0.36	3.19
		3	59.42	59.64	-0.23	-0.38
		4	23.49	23.86	-0.37	-1.57
B1LNUND	Proficiency of non-English language: understanding speech	1	6.99	6.70	0.30	4.28
		2	15.75	15.65	0.10	0.62
		3	57.72	58.19	-0.47	-0.81
		4	19.54	19.47	0.07	0.35
B1LNWRIT	Proficiency of non-English language: writing	1	4.40	4.17	0.23	5.27
		2	6.74	6.59	0.15	2.26
		3	49.59	49.50	0.09	0.18
		4	39.26	39.74	-0.47	-1.20
B1LNWRTH	Undergraduate loan debt a worthwhile investment	0	16.35	16.04	0.31	1.91
		1	83.65	83.96	-0.31	-0.37
B1LOC09	Current school 2009 locale	0	39.46	34.93	4.53	11.48
		1	10.73	11.56	-0.83	-7.70
		2	4.30	4.68	-0.38	-8.81
		3	4.77	6.13	-1.37	-28.69
		4	15.58	16.37	-0.79	-5.05
		5	2.33	2.21	0.12	5.05

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1LOC09	Current school 2009 locale—Continued	6	1.40	1.55	-0.15	-10.62
		7	2.63	2.56	0.07	2.60
		8	3.48	3.60	-0.12	-3.46
		9	1.32	1.30	0.02	1.22
		10	8.09	8.61	-0.52	-6.42
		11	4.54	4.99	-0.45	-9.87
		12	1.37	1.50	-0.14	-9.98
B1LOC1	First school locale	0	44.13	39.61	4.51	10.23
		1	10.74	11.93	-1.18	-11.02
		2	4.24	4.68	-0.44	-10.37
		3	4.12	5.11	-0.99	-24.10
		4	14.24	14.88	-0.64	-4.49
		5	2.21	2.39	-0.18	-7.98
		6	1.69	1.83	-0.14	-8.15
		7	2.17	2.15	0.02	0.96
		8	2.80	3.11	-0.31	-11.18
		9	1.40	1.45	-0.05	-3.43
		10	7.29	7.60	-0.31	-4.28
		11	3.72	3.89	-0.17	-4.68
12	1.27	1.38	-0.12	-9.35		
B1LOGR09	Current, lowest grade taught in 2009	0	20.89	20.80	0.08	0.40
		1	9.12	8.89	0.22	2.45
		2	5.97	6.11	-0.14	-2.32
		3	5.20	5.53	-0.33	-6.34
		4	6.21	6.20	0.01	0.18
		5	5.01	5.35	-0.34	-6.77
		6	8.95	8.60	0.35	3.91
		7	8.94	10.12	-1.18	-13.14
		8	3.91	3.74	0.17	4.37
		9	17.64	17.15	0.49	2.80
		10	3.40	3.23	0.17	5.10
		11	0.91	0.82	0.09	10.02
		12	0.19	0.17	0.02	10.02
13	3.66	3.29	0.37	10.02		
B1LOGR1	First, lowest grade taught	0	22.28	22.37	-0.08	-0.37
		1	8.27	8.14	0.13	1.56
		2	6.01	6.58	-0.57	-9.48
		3	5.19	5.54	-0.35	-6.68
		4	6.88	6.87	0.01	0.14
		5	4.37	4.49	-0.12	-2.75
		6	9.03	8.69	0.34	3.78
		7	9.08	9.90	-0.82	-9.08
		8	3.93	3.77	0.16	4.00
		9	17.31	16.58	0.72	4.17
		10	3.22	3.08	0.14	4.48
		11	1.03	0.92	0.10	10.00
		12	0.11	0.10	0.01	10.00
13	3.30	2.97	0.33	10.00		

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1LOW09	Current school 2009 lowest grade level offered	0	33.75	30.98	2.77	8.21
		1	0.73	0.91	-0.18	-24.54
		2	0.77	0.79	-0.02	-2.48
		3	1.05	1.02	0.03	2.90
		4	0.58	0.66	-0.08	-14.24
		5	1.54	1.46	0.08	5.46
		6	8.87	9.25	-0.38	-4.30
		7	3.74	3.91	-0.17	-4.64
		8	0.87	0.87	-0.01	-0.85
		9	14.08	14.73	-0.65	-4.60
		10	0.73	0.74	-0.02	-2.08
		11	0.07	0.09	-0.01	-18.16
		13	17.93	18.80	-0.86	-4.81
		14	13.50	14.10	-0.60	-4.42
		15	1.28	1.23	0.05	4.24
		16	0.50	0.46	0.04	8.21
B1LOW1	First school lowest grade level offered	0	38.57	35.65	2.92	7.56
		1	0.75	0.93	-0.18	-24.33
		2	0.66	0.69	-0.03	-4.94
		3	0.98	0.96	0.02	1.91
		4	0.71	0.78	-0.08	-10.91
		5	1.37	1.31	0.06	4.46
		6	8.54	8.83	-0.30	-3.46
		7	3.22	3.48	-0.26	-7.92
		8	0.67	0.70	-0.03	-4.05
		9	12.58	13.05	-0.47	-3.73
		10	0.73	0.87	-0.14	-18.51
		11	0.07	0.09	-0.01	-18.98
		13	16.75	17.72	-0.97	-5.80
		14	12.96	13.55	-0.59	-4.58
		15	1.13	1.10	0.03	3.06
		16	0.30	0.28	0.02	7.56
B1LVCAR	Why left teaching: dissatisfied with teaching or wanted another career	0	83.14	83.68	-0.54	-0.65
		1	16.86	16.32	0.54	3.22
B1LVCOND	Why left teaching: workplace conditions	0	90.64	90.84	-0.20	-0.22
		1	9.36	9.16	0.20	2.14
B1LVOTH	Why left teaching: other reasons	0	45.34	45.46	-0.12	-0.25
		1	54.66	54.54	0.12	0.21
B1LVPERS	Why left teaching: personal reasons	0	78.74	78.11	0.63	0.80
		1	21.26	21.89	-0.63	-2.96
B1LVSAL	Why left teaching: inadequate salary/benefits	0	83.38	83.96	-0.58	-0.70
		1	16.62	16.04	0.58	3.50

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1LVTRSF	Why left teaching: laid off or involuntarily transferred	0	93.66	93.26	0.41	0.43
		1	6.34	6.74	-0.41	-6.39
B1MACMP	Attained master's degree as of 2009	0	93.00	93.33	-0.34	-0.36
		1	7.00	6.67	0.34	4.84
B1MAIN	Main disability or impairment	1	5.09	5.87	-0.78	-15.33
		2	3.60	3.42	0.18	5.06
		3	1.25	1.23	0.01	0.99
		4	12.29	12.56	-0.27	-2.20
		5	7.68	7.35	0.33	4.27
		6	21.35	20.53	0.82	3.85
		7	6.20	6.29	-0.09	-1.41
		8	12.18	11.34	0.85	6.94
		9	16.58	17.65	-1.07	-6.45
		10	0.08	0.08	0.01	8.76
		11	1.71	1.56	0.15	8.76
		12	11.99	12.13	-0.14	-1.18
B1MAJCHO	Satisfaction with undergraduate major choice	0	13.31	13.88	-0.57	-4.27
		1	86.69	86.12	0.57	0.66
B1MARR	Current marital status	1	66.73	65.99	0.74	1.10
		1	66.73	65.99	0.74	1.10
		2	24.58	24.95	-0.36	-1.48
		2	24.58	24.95	-0.36	-1.48
		3	4.73	4.74	-0.01	-0.15
		3	4.73	4.74	-0.01	-0.15
		4	0.75	0.83	-0.08	-10.48
		4	0.75	0.83	-0.08	-10.48
		5	3.03	3.31	-0.29	-9.49
		5	3.03	3.31	-0.29	-9.49
B1MAT09	Currently teach math/computer science in 2009	0	98.46	98.40	0.06	0.06
		1	1.54	1.60	-0.06	-3.92
B1MAT1	First job, taught math/computer science	0	98.50	98.39	0.10	0.10
		1	1.50	1.61	-0.10	-6.73
B1MATH	Taught math or computer science since bachelor's	0	98.33	98.22	0.11	0.11
		1	1.67	1.78	-0.11	-6.67
B1MEMP	Months employed as of 2009	0	5.82	5.77	0.05	0.87
		1	1.14	1.10	0.04	3.84
		2	1.01	0.98	0.03	2.97
		3	1.55	1.51	0.05	2.97
		4	1.45	1.44	0.01	0.92
5	1.34	1.26	0.07	5.56		

See notes at end of table.

Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—Continued

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference		
B1MEMP	Months employed as of 2009—Continued	6	1.95	1.86	0.09	4.43		
		7	1.95	1.90	0.05	2.44		
		8	2.52	2.46	0.07	2.66		
		9	2.81	2.75	0.07	2.42		
		10	4.47	4.30	0.17	3.80		
		11	5.60	5.41	0.20	3.55		
		12	5.56	5.40	0.16	2.86		
		13	7.09	6.80	0.29	4.04		
		14	11.92	11.40	0.52	4.35		
		15	8.74	8.44	0.30	3.42		
		16	4.29	4.21	0.08	1.75		
		17	5.42	5.33	0.08	1.50		
		18	5.43	5.51	-0.09	-1.63		
		19	6.26	6.21	0.05	0.75		
		20	4.06	4.14	-0.09	-2.15		
		21	2.14	2.67	-0.53	-24.86		
		22	1.67	2.32	-0.64	-38.43		
		23	2.06	2.13	-0.07	-3.60		
		24	1.58	1.75	-0.17	-10.77		
		25	0.83	0.92	-0.09	-10.44		
		26	0.38	0.58	-0.19	-49.76		
		27	0.47	0.87	-0.40	-85.45		
		28	0.27	0.29	-0.02	-8.17		
		29	0.15	0.16	-0.01	-5.01		
		30	0.05	0.04	#	7.33		
		31	#	0.06	-0.06	-3,090.04		
		B1MILIT	Military status	1	2.89	2.93	-0.03	-1.16
				2	0.96	0.96	#	0.23
				3	0.65	0.69	-0.04	-5.71
				4	95.50	95.43	0.07	0.07
		B1MISC	Content area certification: miscellaneous	0	99.25	99.29	-0.03	-0.03
1	0.75			0.71	0.03	4.66		
B1MISC09	Currently teach miscellaneous subjects in 2009	0	99.80	99.80	#	#		
		1	0.20	0.20	#	0.53		
B1MISC1	First job, taught miscellaneous subjects	0	99.82	99.82	#	#		
		1	0.18	0.18	#	0.43		
B1MISCD	Taught miscellaneous subjects since bachelor's	0	99.75	99.75	#	#		
		1	0.25	0.25	#	0.54		
B1MOLF	Months out of the labor force as of 2009	0	58.78	59.32	-0.54	-0.91		
		1	11.96	11.80	0.16	1.31		
		2	6.95	6.78	0.17	2.48		
		3	4.53	4.36	0.18	3.90		
		4	3.10	3.03	0.08	2.44		
		5	1.72	1.70	0.03	1.58		

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1MOLF	Months out of the labor force as of 2009 —Continued	6	1.64	1.74	-0.10	-5.87
		7	1.16	1.21	-0.05	-4.53
		8	1.05	1.01	0.04	4.15
		9	0.95	0.96	-0.01	-1.44
		10	0.94	0.90	0.04	3.74
		11	0.92	0.89	0.03	3.23
		12	1.15	1.12	0.04	3.19
		13	0.85	0.82	0.03	3.71
		14	1.03	0.97	0.06	5.77
		15	0.98	0.97	0.00	0.41
		16	0.39	0.40	-0.01	-2.61
		17	0.48	0.46	0.02	3.29
		18	0.38	0.39	-0.01	-1.40
		19	0.29	0.27	0.02	7.20
		20	0.32	0.36	-0.04	-12.29
		21	0.09	0.08	0.01	7.33
		22	0.10	0.13	-0.03	-34.29
		23	0.10	0.12	-0.02	-20.76
		24	0.07	0.06	0.00	7.33
		25	0.04	0.08	-0.04	-121.96
26	0.02	0.07	-0.05	-223.55		
29	0.01	0.01	#	7.33		
B1MORED	Reason didn't apply for a teaching position: needed more education	0	37.18	37.42	-0.24	-0.64
		1	62.82	62.58	0.24	0.38
B1MORMON	Reason didn't apply for a teaching position: didn't offer enough money	0	87.52	87.75	-0.23	-0.26
		1	12.48	12.25	0.23	1.82
B1MOVE	Plan to move into non-teaching job in K–12 education	0	76.15	76.42	-0.27	-0.35
		1	23.85	23.58	0.27	1.11
B1MSTR09	Ever enrolled in master's degree program, as of 2009	0	34.83	35.57	-0.73	-2.11
		1	65.17	64.43	0.73	1.13
B1MTH01	Taught math	0	82.05	81.84	0.20	0.25
		1	17.95	18.16	-0.20	-1.14
B1MUNEM	Months unemployed as of 2009	0	56.87	56.96	-0.09	-0.16
		1	11.33	11.16	0.17	1.48
		2	8.84	8.73	0.10	1.15
		3	5.85	5.79	0.06	1.04
		4	4.45	4.32	0.13	3.02
		5	2.94	3.05	-0.10	-3.52
		6	2.59	2.59	#	0.04
		7	1.47	1.48	-0.01	-0.66
		8	1.13	1.24	-0.10	-9.09
		9	1.01	1.04	-0.03	-2.56
		10	0.92	0.92	#	-0.50
11	0.49	0.47	0.02	4.71		

See notes at end of table.

Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—Continued

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1MUNEM	Months unemployed as of 2009—Continued	12	0.44	0.40	0.03	7.31
		13	0.37	0.58	-0.22	-58.87
		14	0.37	0.35	0.01	3.76
		15	0.18	0.16	0.01	7.24
		16	0.15	0.14	0.01	7.33
		17	0.12	0.14	-0.01	-11.82
		18	0.16	0.15	0.01	7.33
		19	0.19	0.18	0.01	7.22
		20	0.03	0.03	#	3.66
		21	0.04	0.06	-0.02	-55.85
		22	0.03	0.03	#	7.33
		23	0.01	0.01	#	7.33
		28	#	#	#	7.33
B1NDGCWK	Non-degree coursework enrollment	0	88.06	88.15	-0.08	-0.10
		1	11.94	11.85	0.08	0.71
B1NF21B2	Second most important reason for working outside bachelor's field	1	17.70	17.78	-0.07	-0.42
		2	14.01	13.97	0.04	0.31
		3	24.57	24.49	0.08	0.31
		4	9.39	9.36	0.03	0.31
		5	7.94	7.92	0.02	0.31
		6	12.33	12.29	0.04	0.31
		7	14.05	14.19	-0.14	-0.99
B1NMBGD	Number of jobs since graduation	1	50.87	50.13	0.75	1.47
		2	31.79	32.03	-0.24	-0.75
		3	11.86	12.11	-0.25	-2.10
		4	3.41	3.64	-0.23	-6.86
		5	1.28	1.28	-0.01	-0.59
		6	0.43	0.41	0.02	5.14
		7	0.29	0.33	-0.05	-15.98
		8	0.06	0.05	#	7.75
		9	0.01	0.01	#	7.75
B1NOLNG	No second best language	0	86.56	86.75	-0.19	-0.22
		1	13.44	13.25	0.19	1.43
B1NP2YR	Able to complete bachelor's without attending public 2-year institution	0	26.47	26.36	0.11	0.43
		1	73.53	73.64	-0.11	-0.16
B1NPDEG	Earned undergraduate certificate or associate's degree at bachelor's degree institution	0	91.29	91.37	-0.08	-0.09
		1	2.92	2.95	-0.02	-0.81
		2	5.47	5.38	0.09	1.64
		3	0.32	0.30	0.02	5.84
B1NPMJCH	Ever formally changed major at NPSAS	0	70.15	70.12	0.03	0.04
		1	29.85	29.88	-0.03	-0.10

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1NSF19B	Job related to major	0	27.43	27.19	0.25	0.90
		1	45.90	45.97	-0.07	-0.15
		2	26.67	26.85	-0.18	-0.66
B1NSF21B	Most important reason for working outside bachelor's field	1	19.74	19.73	0.01	0.03
		2	6.21	6.20	0.01	0.22
		3	7.51	7.50	0.02	0.22
		4	10.46	10.43	0.02	0.22
		5	6.13	6.15	-0.02	-0.34
		6	33.08	33.15	-0.07	-0.22
		7	16.87	16.84	0.04	0.22
B1NSF9D	Method of U.S. citizenship	1	93.25	93.58	-0.32	-0.35
		2	1.26	1.19	0.07	5.17
		3	5.49	5.23	0.26	4.72
B1NSFCHG	Reason working outside bachelor's field: career change	0	77.45	77.45	#	#
		1	22.55	22.55	#	0.01
B1NSFCON	Reason working outside bachelor's field: working conditions	0	61.13	60.98	0.15	0.24
		1	38.87	39.02	-0.15	-0.38
B1NSFFAM	Reason working outside bachelor's field: family-related	0	84.52	84.51	0.01	0.01
		1	15.48	15.49	-0.01	-0.03
B1NSFFLD	Reason working outside bachelor's field: no job in degree field	0	48.16	48.12	0.04	0.08
		1	51.84	51.88	-0.04	-0.08
B1NSFLOC	Reason working outside bachelor's field: job location	0	50.60	50.26	0.34	0.67
		1	49.40	49.74	-0.34	-0.68
B1NSFOFR	Reason working outside bachelor's field: other	0	53.21	52.87	0.34	0.64
		1	46.79	47.13	-0.34	-0.73
B1NSFPAY	Reason working outside bachelor's field: pay/promotion opportunities	0	64.36	63.88	0.48	0.75
		1	35.64	36.12	-0.48	-1.36
B1NTPAY	Reason not currently repaying undergraduate loans	1	0.66	0.65	#	0.59
		2	8.97	9.28	-0.31	-3.47
		3	30.30	28.59	1.71	5.65
		4	1.37	1.23	0.14	10.33
		5	3.75	4.35	-0.60	-15.85
		6	44.89	45.66	-0.78	-1.73
		7	10.05	10.23	-0.17	-1.73
B1NUMJOB	Number of jobs for pay	0	16.24	16.15	0.09	0.57
		1	70.20	70.27	-0.07	-0.10
		2	11.81	11.81	#	0.01
		3	1.53	1.54	-0.01	-0.65
		4	0.14	0.16	-0.01	-8.01
		5	0.06	0.06	#	0.61

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1OFFER	Received any offers for teaching positions	0	85.70	86.37	-0.67	-0.78
		1	14.30	13.63	0.67	4.66
B1OSAM01	Time frame for other school-related income in [REJBTP01] position	1	80.85	79.77	1.07	1.33
		2	6.10	5.92	0.18	2.93
		3	4.66	3.64	1.02	21.80
		4	2.10	2.29	-0.19	-9.07
		5	1.77	2.21	-0.44	-25.07
		6	4.53	6.17	-1.64	-36.10
B1OSAM02	Time frame for other school-related income in [REJBTP02] position	1	88.53	83.92	4.61	5.21
		2	3.96	5.03	-1.07	-26.96
		3	1.15	0.87	0.27	23.74
		4	3.32	7.85	-4.53	-136.53
		5	1.63	1.25	0.39	23.74
		6	1.41	1.08	0.33	23.22
B1OSAM03	Time frame for other school-related income in [REJBTP03] position	1	81.22	82.47	-1.24	-1.53
		4	6.16	5.75	0.41	6.62
		6	12.62	11.78	0.84	6.62
B1OTH	Taught other subjects since bachelor's	0	99.24	99.23	0.01	0.01
		1	0.76	0.77	-0.01	-1.31
B1OTH09	Currently teach other unspecified subject in 2009	0	99.30	99.30	0.01	0.01
		1	0.70	0.70	-0.01	-1.05
B1OTH1	First job, taught other unspecified subject	0	99.38	99.36	0.01	0.01
		1	0.62	0.64	-0.01	-1.83
B1OTHRSN	Reason didn't apply for a teaching position: other reason	0	74.84	74.99	-0.15	-0.20
		1	25.16	25.01	0.15	0.60
B1OTLANG	Know a language other than English	0	17.87	18.18	-0.31	-1.75
		1	82.13	81.82	0.31	0.38
B1OUTFLD	Primary reason for working outside of bachelor's degree field in 2009	1	16.58	16.53	0.05	0.28
		2	5.78	5.84	-0.06	-1.02
		3	6.75	6.93	-0.17	-2.58
		4	9.95	9.80	0.14	1.42
		5	5.00	4.99	0.00	0.07
		6	35.05	34.78	0.27	0.77
		7	20.89	21.12	-0.23	-1.09
B1PARIL	Household composition: live with parents or in-laws	0	74.51	74.79	-0.28	-0.37
		1	25.49	25.21	0.28	1.10
B1PBENST	Postbaccalaureate degree: enrollment summary	0	70.06	68.89	1.17	1.67
		1	20.45	21.31	-0.85	-4.18
		2	6.98	7.23	-0.25	-3.61
		3	2.51	2.58	-0.07	-2.61

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1PLNTCH	Plan to teach in K–12 classroom in future	0	13.58	12.09	1.50	11.02
		1	86.42	87.91	-1.50	-1.73
B1PNTSUP	Teacher satisfaction: parent support	0	32.15	31.65	0.50	1.55
		1	67.85	68.35	-0.50	-0.73
B1PREF	Reason didn't apply for a teaching position: preferred other career	0	73.95	73.90	0.05	0.06
		1	26.05	26.10	-0.05	-0.18
B1PREFT	Prefer to work more hours	0	76.87	77.16	-0.30	-0.39
		1	23.13	22.84	0.30	1.28
B1PREPAR	Prepared for a teaching career at the K–12 level	0	91.07	91.62	-0.55	-0.61
		1	8.93	8.38	0.55	6.20
B1PRSB09	Current, felt prepared to teach subjects in 2009	0	30.96	30.45	0.51	1.65
		1	61.85	62.30	-0.45	-0.73
		2	7.19	7.25	-0.06	-0.82
B1PUPR09	Current school 2009 sector (public/private)	0	32.94	30.98	1.97	5.97
		1	54.92	56.12	-1.20	-2.18
		2	2.39	2.37	0.02	0.86
		3	2.95	3.05	-0.10	-3.41
		4	4.07	4.19	-0.13	-3.07
B1PUPR1	First school sector (public/private)	0	37.69	35.65	2.04	5.40
		1	51.08	52.16	-1.08	-2.11
		2	1.89	1.91	-0.02	-1.07
		3	2.81	3.01	-0.20	-7.28
		4	3.90	4.06	-0.16	-4.04
B1REPAY	Borrowers repayment status for any loans	5	2.72	3.28	-0.56	-20.73
		1	39.06	39.24	-0.18	-0.47
		2	7.01	7.22	-0.21	-2.93
		3	3.50	3.48	0.02	0.61
		4	8.19	8.19	0.00	0.01
		5	7.84	7.98	-0.14	-1.78
		6	0.43	0.46	-0.03	-6.31
7	33.97	33.44	0.53	1.57		
B1RSEMP	Reason for non-degree coursework: current employment	0	55.57	55.27	0.30	0.54
		1	44.43	44.73	-0.30	-0.68
B1RSGOAL	Reason for non-degree coursework: long-term goals	0	50.99	51.42	-0.43	-0.84
		1	49.01	48.58	0.43	0.87
B1RSOTH	Reason for non-degree coursework: other	0	85.39	85.27	0.12	0.14
		1	14.61	14.73	-0.12	-0.80

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1RSPERS	Reason for non-degree coursework: personal enrichment	0	58.66	58.75	-0.09	-0.16
		1	41.34	41.25	0.09	0.23
B1SCI	Taught science since bachelor's	0	98.85	98.80	0.05	0.05
		1	1.15	1.20	-0.05	-4.26
B1SCI09	Currently teach science in 2009	0	99.02	98.97	0.05	0.05
		1	0.98	1.03	-0.05	-5.13
B1SCI1	First job, taught science	0	99.00	98.96	0.03	0.03
		1	1.00	1.04	-0.03	-3.27
B1SEARCH	Looking for a job	0	61.97	61.79	0.18	0.29
		1	38.03	38.21	-0.18	-0.48
B1SEC09	Currently teach secondary education in 2009	0	98.77	98.62	0.16	0.16
		1	1.23	1.38	-0.16	-12.98
B1SEC1	First job, taught secondary education	0	98.84	98.77	0.07	0.07
		1	1.16	1.23	-0.07	-5.60
B1SECED	Taught secondary education since bachelor's	0	98.71	98.54	0.17	0.17
		1	1.29	1.46	-0.17	-13.23
B1SED09	Currently teach special education in 2009	0	99.12	99.05	0.07	0.07
		1	0.88	0.95	-0.07	-8.26
B1SED1	First job, taught special education	0	99.14	99.09	0.05	0.05
		1	0.86	0.91	-0.05	-6.37
B1SOACPR	Stopped out because of academic problems	0	92.85	92.68	0.17	0.18
		1	7.15	7.32	-0.17	-2.33
B1SOC	Taught social sciences since bachelor's	0	98.92	98.86	0.07	0.07
		1	1.08	1.14	-0.07	-6.17
B1SOC09	Currently teach social sciences in 2009	0	99.10	99.03	0.07	0.07
		1	0.90	0.97	-0.07	-7.50
B1SOC1	First job, taught social sciences	0	99.09	99.06	0.02	0.02
		1	0.91	0.94	-0.02	-2.38
B1SOCSUP	Teacher satisfaction: relationships with colleagues and supervisors	0	11.89	11.45	0.43	3.63
		1	88.11	88.55	-0.43	-0.49
B1SOENOT	Stopped out to enroll elsewhere	0	87.20	87.16	0.04	0.04
		1	12.80	12.84	-0.04	-0.27
B1SOFAMC	Stopped out because of change in family status	0	84.44	84.99	-0.56	-0.66
		1	15.56	15.01	0.56	3.57

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1SOJBML	Stopped out because of conflict with job or military	0	88.47	88.04	0.42	0.48
		1	11.53	11.96	-0.42	-3.68
B1SOOFIN	Stopped out for other financial reasons	0	91.83	91.49	0.34	0.37
		1	8.17	8.51	-0.34	-4.16
B1SOOTH	Stopped out for another reason	0	58.59	58.22	0.37	0.63
		1	41.41	41.78	-0.37	-0.89
B1SOPERS	Stopped out for personal reasons	0	71.68	72.16	-0.48	-0.67
		1	28.32	27.84	0.48	1.69
B1SOTMOF	Stopped out because needed time off from studying	0	91.10	91.34	-0.24	-0.26
		1	8.90	8.66	0.24	2.69
B1SOWRK	Stopped out because needed to work	0	76.72	76.94	-0.21	-0.28
		1	23.28	23.06	0.21	0.91
B1SPCOL	Spouse attended college or graduate school in 2008-2009 school year	0	74.67	74.38	0.29	0.39
		1	16.61	16.79	-0.18	-1.06
		2	8.71	8.83	-0.11	-1.31
B1SPECED	Taught special education since bachelor's	0	99.04	98.95	0.08	0.09
		1	0.96	1.05	-0.08	-8.81
B1SPEMP	Spouse employed in 2008	0	11.88	11.48	0.40	3.36
		1	88.12	88.52	-0.40	-0.45
B1SPLN	Spouse had student loans	0	57.44	57.06	0.38	0.66
		1	42.56	42.94	-0.38	-0.89
B1SPLV	Spouse's education level	0	0.38	0.35	0.04	9.77
		1	1.39	1.41	-0.02	-1.33
		2	14.37	14.98	-0.62	-4.30
		3	5.64	5.29	0.36	6.31
		4	8.80	8.83	-0.03	-0.39
		5	9.43	9.43	0.00	0.01
		6	6.36	6.27	0.09	1.44
		7	42.69	42.18	0.51	1.19
B1SPNOT	Not married to spouse in 2008	0	88.84	88.71	0.13	0.15
		1	11.16	11.29	-0.13	-1.17
B1SPODP	Household composition: live with spouse or domestic partner	0	67.74	67.34	0.41	0.60
		1	32.26	32.66	-0.41	-1.26
B1STCOMP	Completed or now completing student teaching or teacher practicum	0	83.45	83.14	0.31	0.37
		1	16.55	16.86	-0.31	-1.89

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1STDISP	Teacher satisfaction: student discipline	0	27.51	26.97	0.54	1.95
		1	72.49	73.03	-0.54	-0.74
B1STOPOT	Ever stopped out before completing bachelor's degree	0	78.97	79.21	-0.24	-0.31
		1	21.03	20.79	0.24	1.15
B1STTC01	Held any other teaching positions after teaching job 1	0	80.76	80.07	0.69	0.85
		1	19.24	19.93	-0.69	-3.56
B1STTC02	Held any other teaching positions after teaching job 2	0	83.90	83.82	0.08	0.09
		1	16.10	16.18	-0.08	-0.49
B1STTC03	Held any other teaching positions after teaching job 3	0	92.91	93.54	-0.63	-0.68
		1	7.09	6.46	0.63	8.90
B1STTC04	Held any other teaching positions after teaching job 4	0	63.39	63.39	#	#
		1	36.61	36.61	#	#
B1STTC05	Held any other teaching positions after teaching job 5	0	0.55	0.55	#	#
		1	99.45	99.45	#	#
B1TCH01	Feel prepared in first teaching job: teach subject matter	0	10.62	11.35	-0.73	-6.89
		1	89.38	88.65	0.73	0.82
B1TCHAPP	Applied for K–12 teaching position since bachelor's degree completion	0	86.74	86.81	-0.07	-0.08
		1	13.26	13.19	0.07	0.51
B1TCHEFF	Teacher satisfaction: effectiveness as a teacher	0	10.90	10.95	-0.05	-0.50
		1	89.10	89.05	0.05	0.06
B1TCHGRT	Aware of TEACH Grant Program	0	85.94	86.21	-0.27	-0.32
		1	14.06	13.79	0.27	1.93
B1TCHNO	Reason didn't apply for a teaching position: did not like teaching	0	96.01	96.02	-0.02	-0.02
		1	3.99	3.98	0.02	0.38
B1TEACH	Teaching status	0	68.98	69.75	-0.76	-1.11
		1	7.93	7.50	0.43	5.37
		2	6.41	6.07	0.34	5.37
		3	7.65	7.24	0.41	5.37
		4	9.03	9.45	-0.42	-4.62
B1TFP09	Current, teach full- or part-time in 2009	0	31.83	30.45	1.38	4.32
		1	54.85	56.09	-1.24	-2.26
		2	13.32	13.46	-0.13	-1.01
B1TFP1	First, taught full- or part-time	0	36.08	34.73	1.35	3.74
		1	50.48	51.25	-0.77	-1.53
		2	13.44	14.02	-0.58	-4.28

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1TTLI09	Current school 2009 Title I eligible	0	47.63	45.82	1.81	3.80
		1	33.49	34.64	-1.15	-3.44
		2	18.88	19.54	-0.66	-3.48
B1TYP09	Current school 2009 type	0	39.45	36.38	3.07	7.78
		1	53.84	56.72	-2.88	-5.35
		2	0.46	0.46	#	0.05
		3	0.16	0.14	0.02	11.67
		4	0.43	0.38	0.05	11.58
B1UNEMSP	Number of unemployment spells as of 2009	0	56.87	56.96	-0.09	-0.16
		1	34.50	34.36	0.14	0.41
		2	7.03	7.04	-0.01	-0.18
		3	1.40	1.41	0.00	-0.32
		4	0.11	0.15	-0.04	-38.20
		5	0.08	0.07	0.01	7.33
B1VLCHUR	Volunteer type: service to a church or other religious organization	0	66.99	67.08	-0.08	-0.12
		1	33.01	32.92	0.08	0.25
B1VLCOM	Volunteer type: service to the community	0	85.77	85.85	-0.08	-0.10
		1	14.23	14.15	0.08	0.58
B1VLFUND	Volunteer type: fundraising (political and non-political)	0	81.86	81.59	0.28	0.34
		1	18.14	18.41	-0.28	-1.53
B1VLFUT	Likely to continue volunteering in next 12 months	0	12.69	12.67	0.02	0.15
		1	87.31	87.33	-0.02	-0.02
B1VLHEAL	Volunteer type: health services, hospital, nursing home or group home	0	88.00	88.06	-0.06	-0.07
		1	12.00	11.94	0.06	0.49
B1VLKIDS	Volunteer type: other work with kids	0	76.80	76.60	0.20	0.26
		1	23.20	23.40	-0.20	-0.85
B1VLNBRH	Volunteer type: neighborhood improvement	0	82.79	82.86	-0.07	-0.08
		1	17.21	17.14	0.07	0.39
B1VLNON	Volunteer type: service to nonprofit organizations	0	69.23	68.75	0.48	0.70
		1	30.77	31.25	-0.48	-1.57
B1VLONE	One time volunteer event	0	88.75	88.87	-0.12	-0.14
		1	11.25	11.13	0.12	1.10
B1VLOTH	Volunteer type: other service not listed	0	83.25	83.00	0.26	0.31
		1	16.75	17.00	-0.26	-1.53
B1VLSOUP	Volunteer type: homeless shelter or soup kitchen	0	86.98	87.16	-0.19	-0.21
		1	13.02	12.84	0.19	1.44

See notes at end of table.

**Table J-3. Distributions of categorical variables before and after imputation, B&B:08/09: 2009—
Continued**

Variable	Description	Value	Percent distribution before imputation	Percent distribution after imputation	Difference	Percent relative difference
B1VLTUT	Volunteer type: tutoring/education-related	0	77.40	77.48	-0.08	-0.11
		1	22.60	22.52	0.08	0.36
B1VOC	Taught vocational education since bachelor's	0	99.71	99.70	0.01	0.01
		1	0.29	0.30	-0.01	-3.82
B1VOC09	Currently teach vocational/career/technical in 2009	0	99.72	99.71	0.01	0.01
		1	0.28	0.29	-0.01	-4.00
B1VOC1	First job, taught vocational/career/technical	0	99.75	99.75	#	0.00
		1	0.25	0.25	#	0.45
B1VOTE	Registered to vote	0	14.73	14.59	0.14	0.97
		1	85.27	85.41	-0.14	-0.17
B1WRK12M	Employed since graduating with bachelor's degree	0	5.15	5.45	-0.30	-5.78
		1	94.85	94.55	0.30	0.31
B1WRKS	Primarily a student or employee while enrolled	1	61.99	61.27	0.72	1.16
		2	38.01	38.73	-0.72	-1.90
BACMPMY	Bachelor's completion date	200707	1.38	1.41	-0.02	-1.75
		200708	4.14	4.18	-0.04	-0.85
		200709	0.65	0.64	0.01	0.99
		200710	0.60	0.58	0.02	2.93
		200711	0.74	0.73	0.01	1.68
		200712	19.08	19.27	-0.19	-1.00
		200801	1.54	1.56	-0.02	-1.44
		200802	0.72	0.71	0.01	1.04
		200803	1.58	1.63	-0.04	-2.58
		200804	2.88	2.91	-0.03	-1.04
		200805	56.90	56.60	0.30	0.52
200806	9.77	9.77	0.00	0.04		
HIOTHDEG	Highest degree attained before BA	1	69.05	69.06	-0.02	-0.02
		2	5.88	5.88	#	0.08
		3	18.05	18.04	0.01	0.08
		4	6.54	6.54	#	-0.06
		5	0.19	0.19	#	0.08
		6	0.29	0.29	#	0.08
I1CTRL	First postsecondary institution control	1	73.23	73.20	0.02	0.03
		2	24.04	24.05	-0.01	-0.03
		3	2.73	2.75	-0.01	-0.49
I1LEVEL	First postsecondary institution level	1	70.19	70.18	0.01	0.02
		2	29.04	29.04	#	-0.01
		3	0.77	0.78	-0.01	-1.37

Rounds to zero.

NOTE: Distributions were computed using the B&B:08/09 interview analysis weight. Cases with legitimate skips for the item are not included in the distributions. The difference is computed as the percentage before imputation minus the percentage after imputation.

ESL = English as a Second Language. NPSAS = National Postsecondary Student Aid Study. TEACH = Teacher Education Assistance for College and Higher Education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond (B&B:08/09).

Table J-4. Item response rates and nonresponse rates for student-level derived variables from the B&B:08/09 transcript data collection: 2009

Variable	Description	Sample size	Item response rate	Item nonresponse rate
QBHSMY	Transcript: High school graduation date (year and month)	16,070	16.99	83.01
QEPMAGPA	Transcript: Pre-college level mathematics: GPA	3,240	56.91	43.09
QESTTGPA	Transcript: Student teaching: GPA	1,590	58.14	41.86
QESPTGPA	Transcript: Sports/PE/recreation: GPA	7,940	71.53	28.47
QECLCGPA	Transcript: Calculus/advanced math: GPA	6,420	81.66	18.34
QELABGPA	Transcript: Introductory laboratory science: GPA	10,410	81.70	18.30
QECSCGPA	Transcript: Computer science: GPA	7,620	82.51	17.49
QEPSYGPA	Transcript: Psychology: GPA	11,180	84.51	15.49
QEMATGPA	Transcript: College-level mathematics: GPA	10,580	84.64	15.36
QEBIOGPA	Transcript: Bio/agri/envir life science: GPA	11,020	85.24	14.76
QEENVGPA	Transcript: Environment and natural resources: GPA	3,060	85.37	14.63
QEWRTGPA	Transcript: Writing beyond English composition: GPA	6,440	85.61	14.39
QEFLGPA	Transcript: Foreign language: GPA	8,380	85.66	14.34
QEPSCGPA	Transcript: Physical science: GPA	11,430	85.71	14.29
QEHISGPA	Transcript: History: GPA	11,960	85.73	14.27
QERELGPA	Transcript: Religious studies and theology: GPA	2,350	85.79	14.21
QEHLTGPA	Transcript: Allied health: GPA	4,120	86.26	13.74
QECHLGPA	Transcript: Child, family, and youth studies: GPA	5,010	87.05	12.95
QEEGTGPA	Transcript: Engineering technologies: GPA	2,220	87.15	12.85
QEEDUGPA	Transcript: Education excluding student teaching: GPA	3,850	87.63	12.37
QEBWCGPA	Transcript: Basic western culture and society: GPA	12,330	87.73	12.27
QEETHGPA	Transcript: Ethics: GPA	4,730	87.75	12.25
QEECSGPA	Transcript: Economics: GPA	6,820	87.84	12.16
QEEGNGPA	Transcript: Engineering: GPA	2,400	88.39	11.61
QEALBGPA	Transcript: Advanced laboratory science: GPA	7,710	88.58	11.42
QEFARGPA	Transcript: Fine arts, incl graphic arts and design: GPA	10,740	88.59	11.41
QENRSGPA	Transcript: Nursing: GPA	940	88.75	11.25
QENWCGPA	Transcript: Non-western culture and society: GPA	3,570	88.86	11.14
QESTAGPA	Transcript: Statistics courses in all departments: GPA	9,260	89.45	10.55
QESCIGPA	Transcript: Science courses: GPA	14,000	89.50	10.50
QESERGPA	Transcript: Science & engineering: GPA	14,160	89.89	10.11
QEAWCGPA	Transcript: Advanced western culture and society: GPA	12,310	90.50	9.50
QEMINGPA	Transcript: Minority/ethnic/women's/cultural studies: GPA	6,390	91.19	8.81
QEMDAGPA	Transcript: Media studies: GPA	5,060	91.34	8.66
QETRNACC	Transcript: Transfer credits accepted by NPSAS institution	16,070	91.41	8.59
QEBUSGPA	Transcript: Business: GPA	6,900	91.44	8.56
QEITLGPA	Transcript: Int'l studies excl arts/humanities/history: GPA	6,330	92.06	7.94
QEYR6GPA	Transcript: GPA in sixth year of attendance	1,670	93.53	6.47
QE1STSTM	Transcript: First year enrollment: STEM credits earned	16,070	94.05	5.95
QE3RDSTM	Transcript: Third year enrollment: STEM credits earned	16,070	94.15	5.85
QE2NDSTM	Transcript: Second year enrollment: STEM credits earned	16,070	94.19	5.81
QE4THSTM	Transcript: Fourth year enrollment: STEM credits earned	16,070	94.21	5.79
QE5THSTM	Transcript: Fifth year enrollment: STEM credits earned	16,070	94.41	5.59
QE6THSTM	Transcript: Sixth year enrollment: STEM credits earned	16,070	94.44	5.56
QEHUMGPA	Transcript: Humanities: GPA	15,420	94.47	5.53
QESTMGPA	Transcript: STEM: GPA	15,500	94.72	5.28
QEYR5GPA	Transcript: GPA in fifth year of attendance	4,330	94.92	5.08

See notes at end of table.

Table J-4. Item response rates and nonresponse rates for student-level derived variables from the B&B:08/09 transcript data collection: 2009—Continued

Variable	Description	Sample size	Item response rate	Item nonresponse rate
QESSCGPA	Transcript: Social sciences: GPA	15,430	95.42	4.58
QE1TO6RN	Transcript: First-sixth years: credits earned	16,070	97.27	2.73
QE12345N	Transcript: First-fifth years: credits earned	16,070	97.33	2.67
QE1234EN	Transcript: First-fourth years: credits earned	16,070	97.46	2.54
QE123ERN	Transcript: First-third years: credits earned	16,070	97.52	2.48
QEYR4GPA	Transcript: GPA in fourth year of attendance	11,270	97.58	2.42
QE12ERN	Transcript: First-second years: credits earned	16,070	97.58	2.42
QE1STERN	Transcript: First year enrollment: credits earned	16,070	97.60	2.40
QE3RDERN	Transcript: Third year enrollment: credits earned	16,070	97.63	2.37
QEAVERGN	Transcript: Per-year average: credits earned	16,070	97.64	2.36
QE2NDERN	Transcript: Second year enrollment: credits earned	16,070	97.68	2.32
QE4THERN	Transcript: Fourth year enrollment: credits earned	16,070	97.69	2.31
QEYR3GPA	Transcript: GPA in third year of attendance	13,610	97.72	2.28
QEYR1GPA	Transcript: GPA in first year of attendance	15,890	97.88	2.12
QE5THERN	Transcript: Fifth year enrollment: credits earned	16,070	97.92	2.08
QBTLNCCR	Transcript: Total non-course credits	16,070	97.98	2.02
QE6THERN	Transcript: Sixth year enrollment: credits earned	16,070	98.04	1.96
QEYR2GPA	Transcript: GPA in second year of attendance	15,260	98.25	1.75
QENSTGPA	Transcript: Non-STEM: GPA	16,060	98.72	1.28
QENSEGPA	Transcript: Non-science & engineering: GPA	16,070	98.73	1.27
QDFA2BCH	Transcript: Elapsed time from entry to NPSAS bachelor's degree	16,070	98.88	1.12
QFMJSTEM	Transcript: STEM major field of study indicator	15,960	99.02	0.98
QESUMRAT	Transcript: Summer terms: ratio of credits earned to total	16,070	99.04	0.96
QFCSFBA	Transcript: NPSAS Bachelor's degree field of study: 4-digit CIP	15,960	99.10	0.90
QFCGFBA	Transcript: NPSAS Bachelor's degree field of study: 2-digit CIP	15,960	99.10	0.90
QF11FBAC	Transcript: NPSAS Bachelor's degree field of study: 11 category	15,960	99.10	0.90
QF23FBAC	Transcript: NPSAS Bachelor's degree field of study: 23 category	15,960	99.10	0.90
QESABRAT	Transcript: Study abroad: ratio of credits earned to total	16,070	99.10	0.90
QBTLAPCR	Transcript: Total AP credits awarded by institution	16,070	99.11	0.89
QEFLATT	Transcript: Foreign language: credits attempted	16,070	99.21	0.79
QEFLERN	Transcript: Foreign language: credits earned	16,070	99.21	0.79
QEHUMERN	Transcript: Humanities: credits earned	16,070	99.24	0.76
QEAWCERN	Transcript: Advanced western culture and society: credits earned	16,070	99.25	0.75
QBOTEXCR	Transcript: Credit by other examination	16,070	99.27	0.73
QBNMNCCR	Transcript: Other non-course based credit	16,070	99.27	0.73
QEITLERN	Transcript: Int'l studies excl arts/humanities/history: credits earned	16,070	99.29	0.71
QESSCERN	Transcript: Social sciences: credits earned	16,070	99.29	0.71
QEHISERN	Transcript: History: credits earned	16,070	99.31	0.69
QEPSYERN	Transcript: Psychology: credits earned	16,070	99.33	0.67
QESUMERN	Transcript: Summer terms: credits earned	16,070	99.33	0.67
QESCIATT	Transcript: Science courses: credits attempted	16,070	99.34	0.66
QESUMATT	Transcript: Summer terms: credits attempted	16,070	99.35	0.65
QESERATT	Transcript: Science & engineering: credits attempted	16,070	99.36	0.64
QEBWCERN	Transcript: Basic western culture and society: credits earned	16,070	99.36	0.64
QENSTERN	Transcript: Non-STEM: credits earned	16,070	99.36	0.64
QEBIOATT	Transcript: Bio/agri/envir life science: credits attempted	16,070	99.36	0.64
QESCIERN	Transcript: Science courses: credits earned	16,070	99.37	0.64

See notes at end of table.

Table J-4. Item response rates and nonresponse rates for student-level derived variables from the B&B:08/09 transcript data collection: 2009—Continued

Variable	Description	Sample size	Item response rate	Item nonresponse rate
QESTMERN	Transcript: STEM: credits earned	16,070	99.37	0.63
QESERERN	Transcript: Science & engineering: credits earned	16,070	99.38	0.62
QENSEERN	Transcript: Non-science & engineering: credits earned	16,070	99.38	0.62
QENSTATT	Transcript: Non-STEM: credits attempted	16,070	99.38	0.62
QEBIOERN	Transcript: Bio/agri/envir life science: credits earned	16,070	99.39	0.61
QENSEATT	Transcript: Non-science & engineering: credits attempted	16,070	99.39	0.61
QEPSEERN	Transcript: Postsecondary career: credits earned	16,070	99.39	0.61
QEPSERAT	Transcript: Postsecondary career: ratio of credits earned to attempted	16,070	99.39	0.61
QESTMATT	Transcript: STEM: credits attempted	16,070	99.40	0.60
QEECNERN	Transcript: Economics: credits earned	16,070	99.40	0.60
QEPSEATT	Transcript: Postsecondary career: credits attempted	16,070	99.40	0.60
QESABERN	Transcript: Study abroad: credits earned	16,070	99.42	0.58
QEPMAERN	Transcript: Pre-college level mathematics: credits earned	16,070	99.42	0.58
QEMINERN	Transcript: Minority/ethnic/women's/cultural studies: credits earned	16,070	99.42	0.58
QEFARERN	Transcript: Fine arts, incl graphic arts and design: credits earned	16,070	99.42	0.58
QDLEYEAR	Transcript: Last year of enrollment	16,070	99.43	0.57
QBNMMLCR	Transcript: Military training/experience course credit	16,070	99.44	0.56
QEMATERN	Transcript: College-level mathematics: credits earned	16,070	99.44	0.56
QENWCERN	Transcript: Non-western culture and society: credits earned	16,070	99.44	0.56
QESTAERN	Transcript: Statistics courses in all departments: credits earned	16,070	99.45	0.55
QEMATATT	Transcript: College-level mathematics: credits attempted	16,070	99.47	0.53
QDFAEVMY	Transcript: First attended ever month/year	16,070	99.47	0.53
QDLEUGMY	Transcript: Last date enrolled as an undergraduate	16,070	99.47	0.53
QEWRTERN	Transcript: Writing beyond English composition: credits earned	16,070	99.47	0.53
QEPSCERN	Transcript: Physical science: credits earned	16,070	99.48	0.52
QEPSCATT	Transcript: Physical science: credits attempted	16,070	99.48	0.52
QECSCERN	Transcript: Computer science: credits earned	16,070	99.48	0.52
QEALBERN	Transcript: Advanced laboratory science: credits earned	16,070	99.48	0.52
QEETHERN	Transcript: Ethics: credits earned	16,070	99.49	0.51
QELABERN	Transcript: Introductory laboratory science: credits earned	16,070	99.49	0.51
QEALBATT	Transcript: Advanced laboratory science: credits attempted	16,070	99.49	0.51
QECLCERN	Transcript: Calculus/advanced math: credits earned	16,070	99.49	0.51
QELABATT	Transcript: Introductory laboratory science: credits attempted	16,070	99.49	0.51
QESTAATT	Transcript: Statistics courses in all departments: credits attempted	16,070	99.49	0.51
QECSCATT	Transcript: Computer science: credits attempted	16,070	99.50	0.50
QESTTATT	Transcript: Student teaching: credits attempted	16,070	99.50	0.50
QESTTERN	Transcript: Student teaching: credits earned	16,070	99.50	0.50
QECLCATT	Transcript: Calculus/advanced math: credits attempted	16,070	99.50	0.50
QESPTERN	Transcript: Sports/PE/recreation: credits earned	16,070	99.51	0.49
QEHLTERN	Transcript: Allied health: credits earned	16,070	99.52	0.48
QEBUSERN	Transcript: Business: credits earned	16,070	99.57	0.43
QEMDAERN	Transcript: Media studies: credits earned	16,070	99.57	0.43
QEENVERN	Transcript: Environment and natural resources: credits earned	16,070	99.58	0.42
QBBIOCRD	Transcript: Biology credits awarded for AP exam	16,070	99.61	0.39
QEEDUATT	Transcript: Education excluding student teaching: credits attempted	16,070	99.61	0.39
QEEDUERN	Transcript: Education excluding student teaching: credits earned	16,070	99.61	0.39
QERELERN	Transcript: Religious studies and theology: credits earned	16,070	99.62	0.38

See notes at end of table.

Table J-4. Item response rates and nonresponse rates for student-level derived variables from the B&B:08/09 transcript data collection: 2009—Continued

Variable	Description	Sample size	Item response rate	Item nonresponse rate
QBNMWKCR	Transcript: Work experience course credit	16,070	99.62	0.38
QECHLERN	Transcript: Child, family, and youth studies: credits earned	16,070	99.63	0.37
QECRDWDR	Transcript: Credits withdrawn	16,070	99.64	0.36
QEEGTERN	Transcript: Engineering technologies: credits earned	16,070	99.65	0.35
QBPHYCRD	Transcript: Physics credit awarded for AP test	16,070	99.65	0.35
QBMTHCRD	Transcript: College-level math credits awarded for AP exam	16,070	99.66	0.34
QEEGNATT	Transcript: Engineering: credits attempted	16,070	99.66	0.34
QEEGNERN	Transcript: Engineering: credits earned	16,070	99.66	0.34
QBNMCPCR	Transcript: College level examination program course credit	16,070	99.66	0.34
QBNMIBCR	Transcript: International baccalaureate course credit	16,070	99.67	0.33
QBCHMCRD	Transcript: Chemistry credits awarded for AP exam	16,070	99.68	0.32
QBCSCCRD	Transcript: Computer science credit awarded for AP test	16,070	99.68	0.32
QEUGCRS	Transcript: Total number of undergraduate courses	16,070	99.68	0.32
QESTMNUM	Transcript: STEM: number taken	16,070	99.68	0.32
QENSTNUM	Transcript: Non-STEM: number taken	16,070	99.68	0.32
QEMATNUM	Transcript: College-level mathematics: number taken	16,070	99.68	0.32
QECLCNUM	Transcript: Calculus/advanced math: number taken	16,070	99.68	0.32
QESTANUM	Transcript: Statistics courses in all departments: number taken	16,070	99.68	0.32
QESCINUM	Transcript: Science courses: number taken	16,070	99.68	0.32
QELABNUM	Transcript: Introductory laboratory science: number taken	16,070	99.68	0.32
QEALBNUM	Transcript: Advanced laboratory science: number taken	16,070	99.68	0.32
QEBIONUM	Transcript: Bio/agri/envir life science: number taken	16,070	99.68	0.32
QEPSCNUM	Transcript: Physical science: number taken	16,070	99.68	0.32
QESERNUM	Transcript: Science & engineering: number taken	16,070	99.68	0.32
QENSENUM	Transcript: Non-science & engineering: number taken	16,070	99.68	0.32
QEEGNNUM	Transcript: Engineering: number taken	16,070	99.68	0.32
QECSCNUM	Transcript: Computer science: number taken	16,070	99.68	0.32
QENRSERN	Transcript: Nursing: credits earned	16,070	99.68	0.32
QEEDUNUM	Transcript: Education excluding student teaching: number taken	16,070	99.68	0.32
QESTTNUM	Transcript: Student teaching: number taken	16,070	99.68	0.32
QEFLNUM	Transcript: Foreign language: number taken	16,070	99.68	0.32
QETOTR	Transcript: Remedial courses: number taken	16,070	99.68	0.32
QEPASR	Transcript: Remedial courses: number passed	16,070	99.68	0.32
QERPTR	Transcript: Remedial courses: number repeated	16,070	99.68	0.32
QEENGR	Transcript: Remedial English: number taken	16,070	99.68	0.32
QEPASENR	Transcript: Remedial English: number passed	16,070	99.68	0.32
QERPTENR	Transcript: Remedial English: number repeated	16,070	99.68	0.32
QERADR	Transcript: Remedial reading: number taken	16,070	99.68	0.32
QEPASRER	Transcript: Remedial reading: number passed	16,070	99.68	0.32
QERPTRER	Transcript: Remedial reading: number repeated	16,070	99.68	0.32
QEMATHR	Transcript: Remedial mathematics: number taken	16,070	99.68	0.32
QEPASMAR	Transcript: Remedial mathematics: number passed	16,070	99.68	0.32
QERPMTAR	Transcript: Remedial mathematics: number repeated	16,070	99.68	0.32
QEOTHERR	Transcript: Remedial, not English/reading/math: number taken	16,070	99.68	0.32
QEPASOTR	Transcript: Remedial, not English/reading/math: number passed	16,070	99.68	0.32
QERPOTR	Transcript: Remedial not English/reading/math: number repeated	16,070	99.68	0.32
QEESL	Transcript: English as a second language: number taken	16,070	99.68	0.32

See notes at end of table.

Table J-4. Item response rates and nonresponse rates for student-level derived variables from the B&B:08/09 transcript data collection: 2009—Continued

Variable	Description	Sample size	Item response rate	Item nonresponse rate
QEPASESL	Transcript: English as a second language: number passed	16,070	99.68	0.32
QERPTESL	Transcript: English as a second language: number repeated	16,070	99.68	0.32
QEREMRAT	Transcript: Ratio of remedial courses to all courses	16,070	99.68	0.32
QETCSRPT	Transcript: Number of repeated courses	16,070	99.68	0.32
QECRDRPT	Transcript: Credits repeated	16,070	99.68	0.32
QERPTRAT	Transcript: Ratio of courses repeated to courses attempted	16,070	99.68	0.32
QECRSWDR	Transcript: Number of courses with withdrawals	16,070	99.68	0.32
QEWDRRAT	Transcript: Ratio of courses withdrawn to courses attempted	16,070	99.68	0.32
QECRSWRT	Transcript: Number of courses with withdraw or repeat grades	16,070	99.68	0.32
QEWTRAT	Transcript: Ratio of withdraw/repeats to all courses	16,070	99.68	0.32
QECOPTOT	Transcript: Total number of co-op or internship courses	16,070	99.68	0.32
QFMNSTEM	Transcript: STEM minor field of study indicator	15,960	99.73	0.27
QFNPBAMY	Transcript: Date bachelor's degree received at NPSAS institution	15,910	99.84	0.16
QFHDGHON	Transcript: NPSAS Bachelor's degree was with honors	16,070	100.00	#

Rounds to zero.

NOTE: The sample size column contains the number of cases who may have been eligible to respond to the item. For items that are within a gate question, the sample size includes cases who did not respond to the gate question. The item response rates and nonresponse rates were computed using the B&B:08/09 student transcript analysis weight. The response rate is computed as the number of cases who responded to the item and did not have a legitimate skip for the item divided by the number of cases who did not have a legitimate skip for the item. CIP = Classification of Instructional Programs GPA = grade point average. NPSAS = National Postsecondary Student Aid Study. STEM = science, technology, engineering, and mathematics. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Appendix K

Analysis Variables

Table K-1. Interview analysis variables

Variable name	Prefix	Variable label
BAMJCIP	Education	Primary BA major CIP code
BACMPMY	Education	BA completion date
BAMAJ123	Education	Bachelor's degree major
HIOTHDEG	Education	Highest degree attained before BA
BAMAJ4Y	Education	Bachelor's degree major (10 categories)
HHE	Education	High Hispanic enrollment
B1ENRST	Education	Enrollment status in 2009
B1HIENR	Education	Highest postbaccalaureate enrollment as of 2009
PSE_BA	Education	Time between PSE and BA completion
NUMINST	Education	Number of institutions attended before BA
COMMCOL	Education	Ever attended a public 2-year institution
HBCUANY	Education	Ever attended HBCU
I1STATE	Education	First postsecondary institution state
PSE_DATE	Education	Date of first postsecondary enrollment
I1SECT	Education	First postsecondary institution sector
HS_BA	Education	Time between HS grad and BA completion
HS_PSE	Education	Time between HS grad and PSE entry
BB_BA	Education	Flag to indicate the B&B BA degree on NSC data file
I1IPEDS	Education	First postsecondary institution IPEDS ID
B1EMPENR	Education	Enrollment/employment status in 2009
B1GRDG1	Education	First postbaccalaureate degree type
B1HIDEG	Education	Highest degree attained as of 2009
B1MACMP	Education	Master's degree status as of 2009
B1PSDMY	Education	Date of first postbaccalaureate completion as of 2009
BAMAJ223	Education	Bachelor's degree second major
B1G1FSDT	Education	Date first began postbaccalaureate
I1CITY	Education	First postsecondary institution city
PBENST	Education	Postbaccalaureate degree: enrollment summary
STOPTOT	Education	Undergrad total months stopped out 1
STOPTOT2	Education	Undergrad total months stopped out 2
TXFR	Education	Undergrad transfer, any
TXFR1TYP	Education	Undergrad type of transfer
I1CTRL	Education	First postsecondary institution control
I1LEVEL	Education	First postsecondary institution level
I1NAME	Education	First postsecondary institution name
DCTR2009	Education	Doctorate status as of 2009
B1GR1CON	Education	First postbaccalaureate institution control
B1GR1CT	Education	Postbaccalaureate: first institution city
B1GR1ID	Education	First postbaccalaureate institution IPEDS ID
B1GR1LEV	Education	First postbaccalaureate institution level

See notes at end of table.

Table K-1. Interview analysis variables—Continued

Variable name	Prefix	Variable label
B1GR1SEC	Education	First postbaccalaureate institution sector
B1GR1ST	Education	First postbaccalaureate institution state
G1NAME	Education	Postbaccalaureate: first institution name
MSTR2009	Education	Postbaccalaureate: enrolled for master's
B1JSTAT	Employment	Working for pay in 2009
B1HOURS	Employment	Hours worked per week in 2009
B1LFP09	Employment	Labor force participation in 2009
AVGSAT	Employment	Average job satisfaction
B1EMPHX	Employment	Employment status August 2007-September 2009
B1EMPMY	Employment	Date began 2009 job
B1MEMP	Employment	Months at 2009 employer
B1MOLF	Employment	Months out of the labor force as of 2009
B1MUNEM	Employment	Months unemployed as of 2009
B1APRLFP	Employment	Labor force participation in April 2009
B1TIMOFF	Employment	Time before current job offer
B1SALNT	Finances	Annual earnings for 2009 job, nonteachers
B1TBAS01-07	Finances	Base salary teaching job 1-7
B1TOJI01-07	Finances	Nonschool income earned 1-7
B1TOSI01-07	Finances	Other school income teaching job 1-7
LNSTATUS	Finances	Status of latest undergraduate Title IV loan
B1BRLN	Finances	Income Based Repayment
B1ERNINC	Finances	Earned income in current job
B1TCRINC	Finances	Total teaching income current teaching jobs
B1TSAL01-07	Finances	Total teaching income job 1-7
B1LOANS	Finances	Took out undergraduate loans
B1PAYPLN	Finances	Repayment plan of Federal loan in 2008-09
B1BORAT	Finances	Cumulative loan amount borrowed for undergraduate
B1NFCUM1	Finances	Cumulative nonfederal loan amount borrowed for undergraduate
B1FDOWE1	Finances	Cumulative federal loan amount owed for undergraduate
B1DEFALT	Finances	Any federal loans in default
B1OWAMT1	Finances	Cumulative total amount owed for undergraduate as of 2009
B1FORGIV	Finances	Participating in loan forgiveness
B1DEFER	Finances	Any loans in deferment
B1FORBAR	Finances	Any loans in forbearance
B1SETTLE	Finances	Loans no longer outstanding through repayment or forgiveness
B1EDPCT	Finances	Monthly loan repayment as percent of income in 2008
B1INC08	Finances	Income in 2008 - categorical
B1INS08	Finances	Spouse's income in 2008 - categorical
B1HHPAY	Finances	Monthly debt payment by household
B1SALPR	Finances	Annual earnings percentile for 2009 job

See notes at end of table.

Table K-1. Interview analysis variables—Continued

Variable name	Prefix	Variable label
B1REPAY	Finances	Borrowers repayment status for any loans
B1RDEFER	Finances	Reason for deferral
B1CARPAY	Finances	Car payment amount
B1SPLNAM	Finances	Spouse's student loan amount
B1SPPAMT	Finances	Spouse's monthly payment on student loans
PBANYAS	Finances	Postbaccalaureate: any assistantships
B1SBLOAN	Finances	Graduate federal subsidized amount in 2008-09
B1GPLAMT	Finances	Graduate PLUS loan amount in 2008-09
B1PRKAMT	Finances	Graduate Perkins loan amount in 08-09
B1STAFSB	Finances	Graduate Stafford subsidized amount in 2008-09
B1STFAMT	Finances	Graduate Stafford total amount in 2008-09
B1STUNSB	Finances	Graduate Stafford unsubsidized amount in 2008-09
B1T4LAMT	Finances	Graduate Title IV loans in 2008-09
B1STFCUM	Finances	Cumulative Stafford total amount through 2009
B1STSCUM	Finances	Cumulative Stafford subsidized amount through 2009
B1STUCUM	Finances	Cumulative Stafford unsubsidized amount through 2009
B1PLUCUM	Finances	Cumulative PLUS loan amount through 2009
B1PERCUM	Finances	Cumulative Perkins loan amount through 2009
B1SUBCUM	Finances	Cumulative Stafford subsidized and Perkins amount through 2009
B1T4XCUM	Finances	Cumulative Stafford and Perkins amount through 2009
B1FDCUM3	Finances	Cumulative federal loan amount borrowed through 2009
B1T4TCUM	Finances	Cumulative Stafford, Perkins, and PLUS amount through 2009
B1T4TOWE	Finances	Cumulative Stafford, Perkins, and PLUS amount owed in 2009
B1T4XOWE	Finances	Cumulative federal loan amount owed in 2009
B1TSTAT	Teachers	Teaching status 2009
B1TCHOCC	Teachers	Has teaching occupation code
B1TCHCIP	Teachers	Has teacher prep CIP code
B1ART	Teachers	Taught art since BA
B1CERT	Teachers	Whether certified to teach
B1ELED	Teachers	Taught elementary education since BA
B1ELJB01 - B1ELJB0N	Teachers	Worked as elementary grade teacher in [first, second, ...] teaching job since BA
B1ELTCHR	Teachers	Worked as elementary grade teacher since BA
B1ENG	Teachers	Taught English since BA
B1ESL	Teachers	Taught ESL since BA
B1FLN	Teachers	Taught foreign language since BA
B1HELP	Teachers	Received help in first teaching job
B1HPE	Teachers	Taught health or physical education since BA
B1ITNTCH	Teachers	Itinerant teacher since BA
B1LTSUB	Teachers	Long-term sub since BA

See notes at end of table.

Table K-1. Interview analysis variables—Continued

Variable name	Prefix	Variable label
B1MATH	Teachers	Taught math since BA
B1MDJB01 - B1MDJB0N	Teachers	Worked as middle grade teacher in [first, second, ...] teaching job since BA
B1MIDTCH	Teachers	Worked as middle grade teacher since BA
B1MISC	Teachers	Taught miscellaneous subjects since BA
B1OTH	Teachers	Taught other subjects since BA
B1OTHTCH	Teachers	Other teacher since BA
B1POS1	Teachers	First teaching position
B1PREP	Teachers	How prepared for first teaching job
B1REGTCH	Teachers	Regular teacher since BA
B1SCI	Teachers	Taught science since BA
B1SCJB01 - B1SCJB0N	Teachers	Worked as high school grade teacher in [first, second, ...] teaching job since BA
B1SCLSCT	Teachers	Sectors of schools in which taught since BA
B1SECED	Teachers	Taught secondary education since BA
B1SECTCH	Teachers	Worked as high school grade teacher since BA
B1SLVSUM	Teachers	Summary of school levels taught since BA
B1SOC	Teachers	Taught social sciences since BA
B1SPECED	Teachers	Taught special education since BA
B1STSUB	Teachers	Short-term sub since BA
B1STUTCH	Teachers	Student teacher since BA
B1SUPTCH	Teachers	Support teacher since BA
B1TCH AID	Teachers	Teacher's aide since BA
B1TEACHER	Teachers	Regular/itinerant/long-term sub or support teacher since BA
B1TJBNUM	Teachers	Number of teaching jobs held since BA
B1VOC	Teachers	Taught vocational education since BA
B1PIPLN	Teachers	Pipeline status as of 2009
B1STDTCH	Teachers	Student teaching experience as of 2009
B1ART09	Teachers	Teach art/music in 2009
B1EE09	Teachers	Teach elementary education in 2009
B1ELSC09	Teachers	School level in 2009
B1ENG09	Teachers	Teach English/language arts in 2009
B1ENR1	Teachers	First school enrollment size
B1ESL09	Teachers	Teach ESL in 2009
B1FL09	Teachers	Teach foreign languages in 2009
B1LEV1	Teachers	First school level
B1LOC1	Teachers	First school locale
B1MAT09	Teachers	Teach math/computer science in 2009
B1OTH09	Teachers	Teach other unspecified in 2009
B1PE09	Teachers	Teach health/physical education in 2009

See notes at end of table.

Table K-1. Interview analysis variables—Continued

Variable name	Prefix	Variable label
B1PMN1	Teachers	First school percent minority
B1POS09	Teachers	Teaching position in 2009
B1SCI09	Teachers	Teach science in 2009
B1SEC09	Teachers	Teach secondary education in 2009
B1SED09	Teachers	Teach special education in 2009
B1SS09	Teachers	Teach social sciences in 2009
B1ST1	Teachers	First school state
B1SUB	Teachers	Worked as aide/sub as of 2009
B1TYP1	Teachers	First school type
B1VOC09	Teachers	Teach vocational/career/technical in 2009
AGEATBA	Background	Age at bachelor's degree
B1MARCH	Background	Family status in 2009
AGEPSE	Background	Age at start of postsecondary education
B1AGE	Background	Age in 2009
B1CHGCIT	Background	Gained U.S. citizenship since BA
B1CITZN	Background	U.S. citizenship status in 2008
B1FRNLNG	Background	Foreign language fluency
B1HHCOMP	Background	Household composition in 2009
B1REGION	Background	Region of residence in 2009
B1SINGP	Background	Single parent in 2009
B1SMSTAT	Background	Residence in BA institution state in 2009
B1VYHRS	Background	Number of hours volunteered in 2008-09

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table K-2. Transcript Analysis Variables

Variable name	Prefix	Variable label
QFNSFMAJ	Awards	NSF/SESTAT field of study: major code
QFNSFMIN	Awards	NSF/SESTAT field of study: minor code
QFHDGHON	Awards	Highest degree attained was with honors
QFHGHC RD	Awards	Credit hours needed for highest award
QFHGHXCR	Awards	Excess credit hours associated with highest award
QFBA1MY	Awards	Date of first bachelor's degree earned
QFBALMY	Awards	Date of most recent bachelor's degree
QFNPBAMY	Awards	Date bachelor's degree received at NPSAS institution
QFCGFBA	Awards	First bachelor's degree field of study: 2-digit CIP
QFCGLBA	Awards	Most recent Bachelor's degree field of study: 2-digit CIP
QFCSFBA	Awards	First bachelor's degree field of study: 4-digit CIP
QFCSLBA	Awards	Most recent bachelor's degree field of study: 4-digit CIP
QF12FBAC	Awards	First bachelor's degree field of study: 12 category
QF18FBAC	Awards	First bachelor's degree field of study: 18 category
QF12LBAC	Awards	Most recent bachelor's degree field of study: 12 category
QF18LBAC	Awards	Most recent bachelor's degree field of study: 18 category
QESTMNUM	Coursework Across Institutions	STEM courses: number taken
QESTMATT	Coursework Across Institutions	STEM courses: credits attempted
QESTMERN	Coursework Across Institutions	STEM courses: credits earned
QESTMGPA	Coursework Across Institutions	STEM courses: GPA
QENSTNUM	Coursework Across Institutions	Non-STEM courses: number taken
QENSTATT	Coursework Across Institutions	Non-STEM courses: credits attempted
QENSTERN	Coursework Across Institutions	Non-STEM courses: credits earned
QENSTGPA	Coursework Across Institutions	Non-STEM courses: GPA
QEPMAERN	Coursework Across Institutions	Pre-college level mathematics courses: Credits Earned
QEPMAGPA	Coursework Across Institutions	Pre-college level mathematics courses: GPA
QEMATNUM	Coursework Across Institutions	All college-level mathematics courses: number taken
QEMATATT	Coursework Across Institutions	All college-level mathematics courses: credits attempted
QEMATERN	Coursework Across Institutions	All college-level mathematics courses: credits earned
QEMATGPA	Coursework Across Institutions	All college-level mathematics courses: GPA
QECLCNUM	Coursework Across Institutions	Calculus/analytic geometry courses: number taken
QECLCATT	Coursework Across Institutions	Calculus/analytic geometry courses: credits attempted
QECLCERN	Coursework Across Institutions	Calculus/analytic geometry courses: credits earned
QECLCGPA	Coursework Across Institutions	Calculus/analytic geometry courses: GPA
QESTANUM	Coursework Across Institutions	Statistics courses in all departments: number taken
QESTAATT	Coursework Across Institutions	Statistics courses in all departments: credits attempted
QESTAERN	Coursework Across Institutions	Statistics courses in all departments: credits earned
QESTAGPA	Coursework Across Institutions	Statistics courses in all departments: GPA
QESCINUM	Coursework Across Institutions	All science courses: number taken
QESCIATT	Coursework Across Institutions	All science courses: credits attempted

See notes at end of table.

Table K-2. Transcript analysis variables—Continued

Variable name	Prefix	Variable label
QESCIERN	Coursework Across Institutions	All science courses: credits earned
QESCIGPA	Coursework Across Institutions	All science courses: GPA
QEEGNUM	Coursework Across Institutions	Engineering courses: number taken
QEEGNATT	Coursework Across Institutions	Engineering courses: credits attempted
QEEGNERN	Coursework Across Institutions	Engineering courses: credits earned
QEEGNGPA	Coursework Across Institutions	Engineering courses: GPA
QEEGTERN	Coursework Across Institutions	Engineering technologies credits earned
QEEGTGPA	Coursework Across Institutions	Engineering technologies GPA
QEBIONUM	Coursework Across Institutions	Biological/agricultural/envir life science courses: number taken Biological/agricultural/envir life science courses: credits attempted
QEBIOATT	Coursework Across Institutions	Biological/agricultural/envir life science courses: credits earned
QEBIOERN	Coursework Across Institutions	Biological/agricultural/envir life science courses: credits earned
QEBIOGPA	Coursework Across Institutions	Biological/agricultural/envir life science courses: GPA
QEENVERN	Coursework Across Institutions	Environment and natural resources credits earned
QEENVGPA	Coursework Across Institutions	Environment and natural resources GPA
QEPSCNUM	Coursework Across Institutions	Physical science courses: number taken
QEPSCATT	Coursework Across Institutions	Physical science courses: credits attempted
QEPSCERN	Coursework Across Institutions	Physical science courses: credits earned
QEPSCGPA	Coursework Across Institutions	Physical science courses: GPA
QELABNUM	Coursework Across Institutions	Introductory laboratory science courses: number taken
QELABATT	Coursework Across Institutions	Introductory laboratory science courses: credits attempted
QELABERN	Coursework Across Institutions	Introductory laboratory science courses: credits earned
QELABGPA	Coursework Across Institutions	Introductory laboratory science courses: GPA
QEALBNUM	Coursework Across Institutions	Advanced laboratory science courses: number taken
QEALBATT	Coursework Across Institutions	Advanced laboratory science courses: credits attempted
QEALBERN	Coursework Across Institutions	Advanced laboratory science courses: credits earned
QEALBGPA	Coursework Across Institutions	Advanced laboratory science courses: GPA
QECSCNUM	Coursework Across Institutions	Computer science courses: number taken
QECSCATT	Coursework Across Institutions	Computer science courses: credits attempted
QECSCERN	Coursework Across Institutions	Computer science courses: credits earned
QECSCGPA	Coursework Across Institutions	Computer science courses: GPA
QEEDUNUM	Coursework Across Institutions	Education courses, excluding student teaching: number taken Education courses, excluding student teaching: credits attempted
QEEDUATT	Coursework Across Institutions	Education courses, excluding student teaching: credits earned
QEEDUERN	Coursework Across Institutions	Education courses, excluding student teaching: credits earned
QEEDUGPA	Coursework Across Institutions	Education courses, excluding student teaching: GPA
QESTTNUM	Coursework Across Institutions	Student teaching courses: number taken
QESTTATT	Coursework Across Institutions	Student teaching courses: credits attempted
QESTTERN	Coursework Across Institutions	Student teaching courses: credits earned
QESTTGPA	Coursework Across Institutions	Student teaching courses: GPA
QEFLNUM	Coursework Across Institutions	Foreign language courses: number taken

See notes at end of table.

Table K-2. Transcript analysis variables—Continued

Variable name	Prefix	Variable label
QEFLATT	Coursework Across Institutions	Foreign language courses: credits attempted
QEFLERN	Coursework Across Institutions	Foreign language courses: credits earned
QEFLGPA	Coursework Across Institutions	Foreign language courses: GPA
QESERNUM	Coursework Across Institutions	Science & engineering courses: number taken
QESERATT	Coursework Across Institutions	Science & engineering courses: credits attempted
QESERERN	Coursework Across Institutions	Science & engineering courses: credits earned
QESERGPA	Coursework Across Institutions	Science & engineering courses: GPA
QENSENUM	Coursework Across Institutions	Non-science & engineering courses: number taken
QENSEATT	Coursework Across Institutions	Non-science & engineering courses: credits attempted
QENSEERN	Coursework Across Institutions	Non-science & engineering courses: credits earned
QENSEGPA	Coursework Across Institutions	Non-science & engineering courses: GPA
QEBUSERN	Coursework Across Institutions	Business credits earned
QEBUSGPA	Coursework Across Institutions	Business GPA
QEECNERN	Coursework Across Institutions	Economics credits earned
QEECNGPA	Coursework Across Institutions	Economics GPA
QESSCERN	Coursework Across Institutions	Social sciences credits earned
QESSCGPA	Coursework Across Institutions	Social sciences GPA
QEHUMERN	Coursework Across Institutions	Humanities credits earned
QEHUMGPA	Coursework Across Institutions	Humanities GPA
QEPSYERN	Coursework Across Institutions	Psychology credits earned
QEPSYGPA	Coursework Across Institutions	Psychology GPA
QEHISERN	Coursework Across Institutions	History credits earned
QEHISGPA	Coursework Across Institutions	History GPA
QEETHERN	Coursework Across Institutions	Ethics credits earned
QEETHGPA	Coursework Across Institutions	Ethics GPA
QEBWCERN	Coursework Across Institutions	Basic western culture and society credits earned
QEBWCGPA	Coursework Across Institutions	Basic western culture and society GPA
QEAWCERN	Coursework Across Institutions	Advanced western culture and society credits earned
QEAWCGPA	Coursework Across Institutions	Advanced western culture and society GPA
QENWCERN	Coursework Across Institutions	Non-western culture and society credits earned
QENWCGPA	Coursework Across Institutions	Non-western culture and society GPA
QEITLERN	Coursework Across Institutions	International studies excl arts/humanities/history credits earned
QEITLGPA	Coursework Across Institutions	International studies excluding arts/humanities/history GPA
QEFARERN	Coursework Across Institutions	Fine arts, including graphic arts and design credits earned
QEFARGPA	Coursework Across Institutions	Fine arts, including graphic arts and design GPA
QEWRTERN	Coursework Across Institutions	Writing beyond English composition credits earned
QEWRTGPA	Coursework Across Institutions	Writing beyond English composition GPA
QERELERN	Coursework Across Institutions	Religious studies and theology credits earned
QERELGPA	Coursework Across Institutions	Religious studies and theology GPA
QEMINERN	Coursework Across Institutions	Minority, ethnic, women's, and cultural studies credits earned

See notes at end of table.

Table K-2. Transcript analysis variables—Continued

Variable name	Prefix	Variable label
QEMINGPA	Coursework Across Institutions	Minority, ethnic, women's, and cultural studies GPA
QECHLERN	Coursework Across Institutions	Child, family, and youth studies credits earned
QECHLGPA	Coursework Across Institutions	Child, family, and youth studies GPA
QESPTERN	Coursework Across Institutions	Sports/PE/recreation credits earned
QESPTGPA	Coursework Across Institutions	Sports/PE/recreation GPA
QEMDAERN	Coursework Across Institutions	Media studies credits earned
QEMDAGPA	Coursework Across Institutions	Media studies GPA
QENRSERN	Coursework Across Institutions	Credits in nursing courses
QENRSGPA	Coursework Across Institutions	Nursing studies GPA
QEHLTERN	Coursework Across Institutions	Allied health credits earned
QEHLTGPA	Coursework Across Institutions	Allied health GPA
QEPRECRD	Coursework Across Institutions	Prior to entry at NPSAS school: credits earned
QETRATT	Coursework Across Institutions	Credits attempted to transfer to NPSAS school
QETRACC	Coursework Across Institutions	Credits accepted by NPSAS school
QE1STERN	Coursework Across Institutions	First year enrollment: credits earned
QE2NDERN	Coursework Across Institutions	Second year enrollment: credits earned
QE12ERN	Coursework Across Institutions	First and second years combined: credits earned
QE3RDERN	Coursework Across Institutions	Third year enrollment: credits earned
QE123ERN	Coursework Across Institutions	First, second and third years combined: credits earned
QE4THERN	Coursework Across Institutions	Fourth year enrollment: credits earned
QE1234EN	Coursework Across Institutions	First, second, third, and fourth years combined: credits earned
QE5THERN	Coursework Across Institutions	Fifth year enrollment: credits earned
QE12345N	Coursework Across Institutions	First, second, third, fourth, and fifth yrs combined: credits earned
QE6THERN	Coursework Across Institutions	Sixth year and beyond enrollment: credits earned
QEAVGERN	Coursework Across Institutions	Per-year average: credits earned
QEPRESTM	Coursework Across Institutions	Prior to entry at NPSAS School: STEM credits earned
QE1STSTM	Coursework Across Institutions	First year enrollment: STEM credits earned
QE2NDSTM	Coursework Across Institutions	Second year enrollment: STEM credits earned
QE3RDSTM	Coursework Across Institutions	Third year enrollment: STEM credits earned
QE4THSTM	Coursework Across Institutions	Fourth year enrollment: STEM credits earned
QE5THSTM	Coursework Across Institutions	Fifth year enrollment: STEM credits earned
QE6THSTM	Coursework Across Institutions	Sixth year and beyond enrollment: STEM credits earned
QETOTDEV	Coursework Across Institutions	Total developmental education credits earned
QETOTNDE	Coursework Across Institutions	Total non-developmental education credits earned
QEDEVSTAT	Coursework Across Institutions	Ratio of developmental to non-developmental credits earned
QEGPABCH	Coursework Across Institutions	GPA at bachelor's degree institution
QEYR1GPA	Coursework Across Institutions	GPA in first year of attendance
QEYR2GPA	Coursework Across Institutions	GPA in second year of attendance
QEYR3GPA	Coursework Across Institutions	GPA in third year of attendance

See notes at end of table.

Table K-2. Transcript analysis variables—Continued

Variable name	Prefix	Variable label
QEYR4GPA	Coursework Across Institutions	GPA in fourth year of attendance
QEYR5GPA	Coursework Across Institutions	GPA in fifth year of attendance
QEYR6GPA	Coursework Across Institutions	GPA in sixth year of attendance
QEGPATRM	Coursework Across Institutions	GPA for term 1 to n
QEPSEATT	Coursework Across Institutions	Postsecondary career: credits attempted
QEPSEERN	Coursework Across Institutions	Postsecondary career: credits earned
QEPSERAT	Coursework Across Institutions	Postsecondary career: ratio of credits earned to attempted
QECNGERN	Coursework Across Institutions	By IPEDS Carnegie Classification - credits earned
QESABERN	Coursework Across Institutions	Study abroad: credits earned
QESABRAT	Coursework Across Institutions	Study abroad: ratio of credits earned to total
QESUMATT	Coursework Across Institutions	Summer terms: credits attempted
QESUMERN	Coursework Across Institutions	Summer terms: credits earned
QESUMRAT	Coursework Across Institutions	Summer terms: ratio of credits earned to total
QEUGCRS	Coursework Across Institutions	Total number of undergraduate courses
QECOPTOT	Coursework Across Institutions	Total number of co-op or internship courses
QENRMATT	Coursework Across Institutions	Normalized credits attempted term 1 to n
QENRMERN	Coursework Across Institutions	Normalized credits earned term 1 to n
QECRSWRT	Coursework Across Institutions	Number of courses with withdraw or repeat grades
QEWTRAT	Coursework Across Institutions	Ratio of withdraw/repeats to all courses
QECRSWDR	Coursework Across Institutions	Number of courses with withdrawals
QECRDWDR	Coursework Across Institutions	Credits withdrawn
QEWDRRAT	Coursework Across Institutions	Ratio of courses withdrawn to courses attempted
QETCSRPT	Coursework Across Institutions	Number of courses with repeats
QECRDRPT	Coursework Across Institutions	Credits repeated
QERPTRAT	Coursework Across Institutions	Ratio of courses repeated to courses attempted
QETOTR	Coursework Across Institutions	Remedial courses: number taken
QEPASR	Coursework Across Institutions	Remedial courses: number passed
QERPTR	Coursework Across Institutions	Remedial courses: number repeated
QEENGR	Coursework Across Institutions	Remedial English courses: number taken
QEPASENR	Coursework Across Institutions	Remedial English courses: number passed
QERPTENR	Coursework Across Institutions	Remedial English courses: number repeated
QEREADR	Coursework Across Institutions	Remedial reading courses: number taken
QEPASRER	Coursework Across Institutions	Remedial reading courses: number passed
QERPTRER	Coursework Across Institutions	Remedial reading courses: number repeated
QEMATHR	Coursework Across Institutions	Remedial mathematics courses: number taken
QEPASMAR	Coursework Across Institutions	Remedial mathematics courses: number passed
QERPMTAR	Coursework Across Institutions	Remedial mathematics courses: number repeated
QEOTHERR	Coursework Across Institutions	Remedial courses, not English, reading, or math: number taken
QEPASOTR	Coursework Across Institutions	Remedial courses, not English, reading, or math: number passed

See notes at end of table.

Table K-2. Transcript analysis variables—Continued

Variable name	Prefix	Variable label
QERPTOTR	Coursework Across Institutions	Remedial courses, not English, reading, or math: number repeated
QEESL	Coursework Across Institutions	English as a second language courses: number taken
QEPASESL	Coursework Across Institutions	English as a second language courses: number passed
QERPTESL	Coursework Across Institutions	English as a second language courses: number repeated
QEPRGR	Coursework Across Institutions	Remedial progression
QEREMRAT	Coursework Across Institutions	Ratio of remedial courses to all courses
QEALBEN	Coursework Across Institutions	Credit earned in ability-to-benefit status
QDLEUGMY	Enrollment and Attendance	Last date enrolled as an undergraduate
QDTMHON	Enrollment and Attendance	Term honors indicator
QDTMPRB	Enrollment and Attendance	Term probation indicator
QDTMDIS	Enrollment and Attendance	Term dismissal indicator
QDEN2009	Enrollment and Attendance	Enrolled in 2009
QDLEYEAR	Enrollment and Attendance	Last year of enrollment
QDFA2BCH	Enrollment and Attendance	Elapsed time from entry to bachelor's degree
QBHSMY	Pre-College Information	High school graduation year and month
QBBIOCR	Pre-College Information	AP Biology credit awarded by institution
QBCABCR	Pre-College Information	AP Calculus AB credit awarded by institution
QBCBCCR	Pre-College Information	AP Calculus BC credit awarded by institution
QBCHMCR	Pre-College Information	AP Chemistry credit awarded by institution
QBCSACR	Pre-College Information	AP Comp Sci - A credit awarded by institution
QBCSBCR	Pre-College Information	AP Comp Sci - B credit awarded by institution
QBPHYCR	Pre-College Information	AP Physics credit awarded by institution
QBPEHCR	Pre-College Information	AP Physics C - E & M credit awarded by institution
QBPHMCR	Pre-College Information	AP Physics C - Mech. credit awarded by institution
QBTLAPCR	Pre-College Information	Total AP credits awarded by institution
QBAPCRCL	Pre-College Information	Total credits awarded in AP subject clusters by institution
QBNMAPCR	Pre-College Information	Advanced Placement course credit
QBNMWKCR	Pre-College Information	Work experience course credit
QBNMMLCR	Pre-College Information	Military training/experience course credit
QBNMPCCR	Pre-College Information	College level examination program course credit
QBNMIBCR	Pre-College Information	International baccalaureate course credit
QBNMDUCR	Pre-College Information	Dual enrollment course credit
QBOTEXCR	Pre-College Information	Credit by other examination
QBNMNCCR	Pre-College Information	Other non-course avenues course credit
QBTLNCCR	Pre-College Information	Total non-course credits
RTNORMCR	Transcript_courses	Normalized credit
RTNGRAD	Transcript_courses	Normalized grade
RTMJ1CGN	Transcript_degree	Major one CIP family
RTMJ2CGN	Transcript_degree	Major two CIP family

See notes at end of table.

Table K-2. Transcript analysis variables—Continued

Variable name	Prefix	Variable label
RTMN1CGN	Transcript_degree	Minor CIP family
RTMN2CGN	Transcript_degree	Second minor CIP family
RTCONCGN	Transcript_degree	Concentration CIP family
RTFAMY	Transcript_studschools	First attended month/year
RTLAMY	Transcript_studschools	Last attended month/year
RTFBA	Transcript_studschools	First BA school
RTMRCNT	Transcript_studschools	Most recently attended institution
RTGPAFY	Transcript_studschools	First year GPA
RTDBLMJ	Transcript_studschools	Double majors indicator
RTDBLBC	Transcript_studschools	Double BA's indicator
RTENRCN	Transcript_studschools	Enrolled continuously
RTENRFT	Transcript_studschools	Proportion of all terms when student enrolled full-time
RTENRTM	Transcript_studschools	Number of terms enrolled
RTENRSM	Transcript_studschools	Simultaneously enrolled at another institution
RTRNSY	Transcript_studschools	Student transferred within a system
RTMJ12	Transcript_studschools	Major field of study, 12 category
RTMJ18	Transcript_studschools	Major field of study, 18 category
RTNPSMJ	Transcript_studschools	Major field of study, NPSAS categories
RTMJCGN	Transcript_studschools	Major field of study, 2-digit CIP
RTMJCSP	Transcript_studschools	Major field of study, 4-digit CIP
RTMJNSF	Transcript_studschools	NSF/SESTAT field of study indicator (major code)
RTMNNSF	Transcript_studschools	NSF/SESTAT specific field (minor code)
RTMJGPA	Transcript_studschools	Major GPA
RTTOTR	Transcript_studschools	Remedial courses: number taken
RTCRR	Transcript_studschools	Remedial courses: credits earned
RTGPAR	Transcript_studschools	Remedial courses: GPA
RTESL	Transcript_studschools	ESL courses: number taken
RTCRESL	Transcript_studschools	ESL courses: credits earned
RTGPESL	Transcript_studschools	ESL courses: GPA
RTENGR	Transcript_studschools	Remedial English courses: number taken
RTCRENR	Transcript_studschools	Remedial English courses: credits earned
RTGPENR	Transcript_studschools	Remedial English courses: GPA
RTMATHR	Transcript_studschools	Remedial mathematics courses: number taken
RTCRMAR	Transcript_studschools	Remedial mathematics courses: credits earned
RTGPMAR	Transcript_studschools	Remedial mathematics courses: GPA
RTOTHRR	Transcript_studschools	Remedial courses, not English or mathematics: number taken
RTCROTR	Transcript_studschools	Remedial courses, not English or mathematics: credits earned
RTGPOTR	Transcript_studschools	Remedial courses, not English or mathematics: GPA
RTCRRTH	Transcript_studschools	All mathematics: credits earned
RTGPRTH	Transcript_studschools	All mathematics: GPA

See notes at end of table.

Table K-2. Transcript analysis variables—Continued

Variable name	Prefix	Variable label
RTCRDEQ	Transcript_studschools	Differential equations/advanced mathematics: credits earned
RTGPDEQ	Transcript_studschools	Differential equations/advanced mathematics: GPA
RTCRCLC	Transcript_studschools	Calculus and analytic geometry: credits earned
RTGPCLC	Transcript_studschools	Calculus and analytic geometry: GPA
RTCRMCL	Transcript_studschools	College-level mathematics: credits earned
RTGPMCL	Transcript_studschools	College-level mathematics: GPA
RTCRMPC	Transcript_studschools	Pre-college mathematics: credits earned
RTGPMPC	Transcript_studschools	Pre-college mathematics: GPA
RTCRSCI	Transcript_studschools	All sciences courses: credits earned
RTGPSCI	Transcript_studschools	All sciences courses: GPA
RTCREGN	Transcript_studschools	Engineering: credits earned
RTGPEGN	Transcript_studschools	Engineering: GPA
		Biological/agricultural/environmental life sciences: credits earned
RTCRBIO	Transcript_studschools	Biological/agricultural/environmental life sciences: credits earned
RTGPBIO	Transcript_studschools	Biological/agricultural/environmental life sciences: GPA
RTCRPSC	Transcript_studschools	Physical and related sciences: credits earned
RTGPPSC	Transcript_studschools	Physical and related sciences: GPA
RTCRLB	Transcript_studschools	Introductory laboratory science: credits earned
RTGPLB	Transcript_studschools	Introductory laboratory science: GPA
RTCRALB	Transcript_studschools	Advanced laboratory science: credits earned
RTGPALB	Transcript_studschools	Advanced laboratory science: GPA
RTCR CSC	Transcript_studschools	Computer science: credits earned
RTGPCSC	Transcript_studschools	Computer science: GPA
RTCREDU	Transcript_studschools	Education courses (excluding student teaching): credits earned
RTGPEDU	Transcript_studschools	Education courses (excluding student teaching): GPA
RTCRSTT	Transcript_studschools	Student teaching: credits earned
RTGPSTT	Transcript_studschools	Student teaching: GPA
RTCRFL	Transcript_studschools	Foreign language courses: credits earned
RTGPGL	Transcript_studschools	Foreign language courses: GPA
RTCRTRD	Transcript_studschools	Trades and occupations courses: credits earned
RTGPTRD	Transcript_studschools	Trades and occupations courses: GPA
RTCRSE	Transcript_studschools	Science & engineering related fields: credits earned
RTGPSE	Transcript_studschools	Science & engineering related fields: GPA
RTCRNSE	Transcript_studschools	Non-science & engineering fields: credits earned
RTGPNSE	Transcript_studschools	Non-science & engineering fields: GPA
RTGRHON	Transcript_studschools	Graduated with honors at institution
RTTOTCR	Transcript_studschools	Credit hours earned at institution
RTNEDCR	Transcript_studschools	Credit hours needed for award at institution
RTXCSCR	Transcript_studschools	Excess credit hours at institution
RTGPA	Transcript_studschools	Overall GPA at institution

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Appendix L

Design Effects

Table L-1. Design effects for selected variables using the B&B:08/09 interview weight (WTA000) for all students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Bachelor's degree major—STEM major	MAJORS4Y = 1, 2, 3	16.41	0.32	0.30	15,050	1.05	1.10
Cumulative undergraduate grade point average	GPA (mean)	326.25	0.65	0.39	15,050	1.67	2.79
First institution sector—2-year or less	I1SECT = 2, 3, 5, 6, 8, 9	29.82	0.59	0.38	14,500	1.55	2.39
Number of institutions attended before bachelor's completion	NUMINST > 1	55.11	0.66	0.41	15,050	1.64	2.69
Time to 2007–08 bachelor's degree	PSE_BA (mean time in months)	78.72	0.96	0.57	15,050	1.70	2.88
Debt burden in 2008–09	B1EDPCT (mean)	9.21	0.27	0.18	8,680	1.55	2.40
Ever received Pell Grant	PELLYRS = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	37.19	0.68	0.39	15,050	1.74	3.01
Loan status in 2008–09—Not repaying	LNSTATUS = 1, 2, 3	17.77	0.47	0.31	15,050	1.52	2.30
Enrollment status in degree program in 2009—Master's	B1ENRST = 4	1.10	0.13	0.09	15,050	1.51	2.28
Highest degree program enrollment after bachelor's degree, as of 2009—Master's	B1HIENR = 5	19.38	0.50	0.32	15,050	1.55	2.42
Number of jobs held since bachelor's degree—One	B1NMJBG = 1	50.13	0.65	0.42	14,050	1.55	2.40
Employment status in 2009—One job	B1LFP09 = 1, 2, 3, 4	70.27	0.55	0.37	15,050	1.47	2.17
Satisfied with employment in 2009: Compensation	B1JBPAY = 1	55.83	0.68	0.45	12,270	1.52	2.30
Employer benefits in 2009 offered medical or health insurance	B1EMPMI = 1	76.30	0.55	0.39	12,010	1.42	2.01
Job not part of career in industry	B1CARIND = 0	16.46	0.61	0.39	9,000	1.55	2.42
Job unrelated to major	B1NSF19B = 0	27.15	0.62	0.40	12,270	1.55	2.40
Highest education attained by either parent—Bachelor's degree	PAREduc = 7	26.04	0.54	0.36	15,050	1.51	2.28
Age at bachelor's degree receipt	AGEATBA (mean)	25.27	0.10	0.06	15,050	1.72	2.96
Had disability in 2007–08	DISABLE = 1	8.22	0.36	0.22	15,050	1.60	2.55
Marital status and dependents—Unmarried with no dependents	B1MARCH = 1	65.30	0.64	0.39	15,050	1.66	2.76
Volunteered in last 12 months as of 2009	B1COMSRV = 1	40.90	0.59	0.40	15,050	1.46	2.14
Ever voted as of 2009	B1EVRVT = 1	87.45	0.44	0.27	15,050	1.65	2.71
Cumulative total amount borrowed	B1BORAT (mean)	\$ 16,299.18	231.25	153.05	15,050	1.51	2.28
Cumulative amount owed as of 2008–09	B1OWAMT1 (mean)	24,144.98	297.98	190.55	11,070	1.56	2.45
Cumulative federal amount borrowed	FEDCUM1 (mean)	11,304.20	158.31	100.76	15,050	1.57	2.47
Earned income in 2009	B1ERNINC (mean)	29,139.72	311.23	196.72	15,050	1.58	2.50
Summary statistics							
Mean	†	†	†	†	†	1.55	2.43
Minimum	†	†	†	†	†	1.05	1.10
25th percentile	†	†	†	†	†	1.51	2.28
Median	†	†	†	†	†	1.55	2.41
75th percentile	†	†	†	†	†	1.64	2.69
Maximum	†	†	†	†	†	1.74	3.01

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis.

STEM = science, technology, engineering, and mathematics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-2. Design effects for selected variables using the B&B:08/09 interview weight (WTA000) for students whose base year institution was public: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Bachelor's degree major—STEM major	MAJORS4Y = 1, 2, 3	17.63	0.51	0.41	8,680	1.25	1.55
Cumulative undergraduate grade point average	GPA (mean)	321.05	0.90	0.53	8,680	1.70	2.90
First institution sector—2-year or less	I1SECT = 2, 3, 5, 6, 8, 9	31.71	0.76	0.51	8,420	1.50	2.25
Number of institutions attended before bachelor's completion	NUMINST > 1	55.71	0.84	0.53	8,680	1.57	2.47
Time to 2007–08 bachelor's degree	PSE_BA (mean time in months)	74.14	1.03	0.65	8,680	1.59	2.53
Debt burden in 2008–09	B1EDPCT (mean)	8.23	0.32	0.21	4,780	1.50	2.26
Ever received Pell Grant	PELLYRS = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	37.90	0.76	0.52	8,680	1.45	2.10
Loan status in 2008–09—Not repaying	LNSTATUS = 1, 2, 3	16.39	0.65	0.40	8,680	1.62	2.64
Enrollment status in degree program in 2009—Master's	B1ENRST = 4	1.15	0.17	0.11	8,680	1.46	2.13
Highest degree program enrollment after bachelor's degree, as of 2009—Master's	B1HIENR = 5	19.90	0.66	0.43	8,680	1.53	2.35
Number of jobs held since bachelor's degree—One	B1NMJBG = 1	50.36	0.84	0.56	8,100	1.50	2.26
Employment status in 2009—One job	B1LFP09 = 1, 2, 3, 4	70.63	0.70	0.49	8,680	1.43	2.06
Satisfied with employment in 2009: Compensation	B1JBPAY = 1	55.36	0.97	0.59	7,100	1.65	2.72
Employer benefits in 2009 offered medical or health insurance	B1EMPMI = 1	76.50	0.73	0.51	6,950	1.43	2.04
Job not part of career in industry	B1CARIND = 0	16.41	0.82	0.51	5,220	1.60	2.54
Job unrelated to major	B1NSF19B = 0	27.06	0.82	0.53	7,100	1.56	2.43
Highest education attained by either parent—Bachelor's degree	PAREduc = 7	27.33	0.70	0.48	8,680	1.46	2.13
Age at bachelor's degree receipt	AGEATBA (mean)	24.75	0.10	0.06	8,680	1.57	2.46
Had disability in 2007–08	DISABLE = 1	8.33	0.45	0.30	8,680	1.53	2.35
Marital status and dependents—Unmarried with no dependents	B1MARCH = 1	65.59	0.78	0.51	8,680	1.54	2.36
Volunteered in last 12 months as of 2009	B1COMSRV = 1	39.60	0.72	0.53	8,680	1.38	1.90
Ever voted as of 2009	B1EVRVT = 1	86.75	0.64	0.36	8,680	1.75	3.06
Cumulative total amount borrowed	B1BORAT (mean)	\$ 13,065.96	299.01	164.54	8,680	1.82	3.30
Cumulative amount owed as of 2008–09	B1OWAMT1 (mean)	20,335.75	328.19	209.57	6,100	1.57	2.45
Cumulative federal amount borrowed	FEDCUM1 (mean)	9,956.62	229.95	127.27	8,680	1.81	3.26
Earned income in 2009	B1ERNINC (mean)	28,089.85	346.86	238.77	8,680	1.45	2.11
Summary statistics							
Mean	†	†	†	†	†	1.55	2.41
Minimum	†	†	†	†	†	1.25	1.55
25th percentile	†	†	†	†	†	1.46	2.13
Median	†	†	†	†	†	1.53	2.36
75th percentile	†	†	†	†	†	1.60	2.54
Maximum	†	†	†	†	†	1.82	3.30

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis.

GPS = grade point average. STEM = science, technology, engineering, and mathematics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-3. Design effects for selected variables using the B&B:08/09 interview weight (WTA000) for students whose base year institution was private nonprofit: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Bachelor's degree major—STEM major	MAJORS4Y = 1, 2, 3	14.19	0.66	0.47	5,610	1.41	2.00
Cumulative undergraduate grade point average	GPA (mean)	334.38	0.97	0.59	5,610	1.63	2.66
First institution sector—2-year or less	I1SECT = 2, 3, 5, 6, 8, 9	24.21	1.04	0.59	5,330	1.76	3.12
Number of institutions attended before bachelor's completion	NUMINST > 1	51.48	1.26	0.67	5,610	1.88	3.55
Time to 2007–08 bachelor's degree	PSE_BA (mean time in months)	77.30	1.68	0.97	5,610	1.74	3.01
Debt burden in 2008–09	B1EDPCT (mean)	10.99	0.55	0.33	3,320	1.67	2.80
Ever received Pell Grant	PELLYRS = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	33.36	1.29	0.63	5,610	2.05	4.20
Loan status in 2008–09—Not repaying	LNSTATUS = 1, 2, 3	19.81	0.85	0.53	5,610	1.60	2.56
Enrollment status in degree program in 2009—Master's	B1ENRST = 4	1.17	0.22	0.14	5,610	1.57	2.45
Highest degree program enrollment after bachelor's degree, as of 2009—Master's	B1HIENR = 5	19.30	0.75	0.53	5,610	1.42	2.02
Number of jobs held since bachelor's degree—One	B1NMJBG = 1	48.73	1.07	0.69	5,230	1.54	2.38
Employment status in 2009—One job	B1LFP09 = 1, 2, 3, 4	68.77	0.97	0.62	5,610	1.57	2.46
Satisfied with employment in 2009: Compensation	B1JBPAY = 1	56.53	1.04	0.74	4,540	1.42	2.01
Employer benefits in 2009 offered medical or health insurance	B1EMPMI = 1	74.91	0.91	0.65	4,450	1.40	1.95
Job not part of career in industry	B1CARIND = 0	17.02	1.03	0.65	3,320	1.58	2.49
Job unrelated to major	B1NSF19B = 0	27.90	1.09	0.67	4,540	1.64	2.68
Highest education attained by either parent—Bachelor's degree	PAREduc = 7	25.17	0.88	0.58	5,610	1.52	2.31
Age at bachelor's degree receipt	AGEATBA (mean)	25.19	0.18	0.10	5,610	1.88	3.55
Had disability in 2007–08	DISABLE = 1	8.06	0.62	0.36	5,610	1.72	2.95
Marital status and dependents—Unmarried with no dependents	B1MARCH = 1	68.80	0.99	0.62	5,610	1.60	2.58
Volunteered in last 12 months as of 2009	B1COMSRV = 1	44.69	1.10	0.66	5,610	1.66	2.75
Ever voted as of 2009	B1EVRVT = 1	88.75	0.60	0.42	5,610	1.42	2.03
Cumulative total amount borrowed	B1BORAT (mean)	\$ 20,148.31	513.93	299.54	5,610	1.72	2.94
Cumulative amount owed as of 2008–09	B1OWAMT1 (mean)	28,377.82	582.57	362.42	4,260	1.61	2.58
Cumulative federal amount borrowed	FEDCUM1 (mean)	12,003.79	307.57	156.96	5,610	1.96	3.84
Earned income in 2009	B1ERNINC (mean)	29,495.55	686.14	353.10	5,610	1.94	3.78
Summary statistics							
Mean	†	†	†	†	†	1.65	2.76
Minimum	†	†	†	†	†	1.40	1.95
25th percentile	†	†	†	†	†	1.54	2.38
Median	†	†	†	†	†	1.62	2.62
75th percentile	†	†	†	†	†	1.74	3.01
Maximum	†	†	†	†	†	2.05	4.20

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis.

GPA = grade point average. STEM = science, technology, engineering, and mathematics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-4. Design effects for selected variables using the B&B:08/09 interview weight (WTA000) for students whose base year institution was private for-profit: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Bachelor's degree major—STEM major	MAJORS4Y = 1, 2, 3	15.34	2.41	1.31	760	1.85	3.41
Cumulative undergraduate grade point average	GPA (mean)	339.78	3.05	1.51	760	2.02	4.10
First institution sector—2-year or less	I1SECT = 2, 3, 5, 6, 8, 9	42.46	2.81	1.81	750	1.55	2.41
Number of institutions attended before bachelor's completion	NUMINST > 1	72.53	2.92	1.62	760	1.80	3.26
Time to 2007–08 bachelor's degree	PSE_BA (mean time in months)	150.97	8.10	4.03	760	2.01	4.04
Debt burden in 2008–09	B1EDPCT (mean)	8.69	0.88	0.65	580	1.36	1.84
Ever received Pell Grant	PELLYRS = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	54.56	2.97	1.80	760	1.65	2.71
Loan status in 2008–09—Not repaying	LNSTATUS = 1, 2, 3	22.17	2.86	1.50	760	1.90	3.60
Enrollment status in degree program in 2009—Master's	B1ENRST = 4	0.03	0.04	0.06	760	0.62	0.39
Highest degree program enrollment after bachelor's degree, as of 2009—Master's	B1HIENR = 5	12.92	2.45	1.22	760	2.01	4.05
Number of jobs held since bachelor's degree—One	B1NMJBG = 1	56.72	3.31	1.84	720	1.80	3.23
Employment status in 2009—One job	B1LFP09 = 1, 2, 3, 4	75.92	2.94	1.55	760	1.90	3.61
Satisfied with employment in 2009: Compensation	B1JBPAY = 1	57.18	3.76	1.96	640	1.92	3.70
Employer benefits in 2009 offered medical or health insurance	B1EMPMI = 1	83.00	2.82	1.52	610	1.85	3.44
Job not part of career in industry	B1CARIND = 0	13.51	1.88	1.60	460	1.18	1.38
Job unrelated to major	B1NSF19B = 0	23.31	2.82	1.67	640	1.69	2.85
Highest education attained by either parent—Bachelor's degree	PAREduc = 7	14.45	2.80	1.27	760	2.20	4.84
Age at bachelor's degree receipt	AGEATBA (mean)	32.96	0.77	0.35	760	2.18	4.75
Had disability in 2007–08	DISABLE = 1	7.90	1.57	0.98	760	1.60	2.58
Marital status and dependents—Unmarried with no dependents	B1MARCH = 1	36.66	3.99	1.75	760	2.29	5.23
Volunteered in last 12 months as of 2009	B1COMSRV = 1	31.92	3.04	1.69	760	1.80	3.25
Ever voted as of 2009	B1EVRVT = 1	87.84	2.00	1.18	760	1.69	2.84
Cumulative total amount borrowed	B1BORAT (mean)	\$ 33,203.05	1,593.08	687.13	760	2.32	5.38
Cumulative amount owed as of 2008–09	B1OWAMT1 (mean)	36,757.49	1,442.73	761.52	710	1.89	3.59
Cumulative federal amount borrowed	FEDCUM1 (mean)	24,724.29	1,478.44	530.49	760	2.79	7.77
Earned income in 2009	B1ERNINC (mean)	40,928.19	1,603.99	1,023.09	760	1.57	2.46
Summary statistics							
Mean	†	†	†	†	†	1.82	3.49
Minimum	†	†	†	†	†	0.62	0.39
25th percentile	†	†	†	†	†	1.65	2.71
Median	†	†	†	†	†	1.85	3.42
75th percentile	†	†	†	†	†	2.01	4.05
Maximum	†	†	†	†	†	2.79	7.77

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).

² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis.

GPA = grade point average. STEM = science, technology, engineering, and mathematics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-5. Design effects for selected variables using the B&B:08/09 interview weight (WTA000) for White students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Bachelor's degree major—STEM major	MAJORS4Y = 1, 2, 3	15.91	0.44	0.35	10,750	1.24	1.54
Cumulative undergraduate grade point average	GPA (mean)	330.37	0.80	0.46	10,750	1.75	3.05
First institution sector—2-year or less	I1SECT = 2, 3, 5, 6, 8, 9	28.50	0.62	0.44	10,370	1.41	1.97
Number of institutions attended before bachelor's completion	NUMINST > 1	53.79	0.73	0.48	10,750	1.52	2.32
Time to 2007–08 bachelor's degree	PSE_BA (mean time in months)	75.90	1.08	0.66	10,750	1.64	2.69
Debt burden in 2008–09	B1EDPCT (mean)	9.55	0.28	0.19	6,260	1.46	2.13
Ever received Pell Grant	PELLYRS = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	30.63	0.76	0.44	10,750	1.71	2.93
Loan status in 2008–09—Not repaying	LNSTATUS = 1, 2, 3	16.05	0.51	0.35	10,750	1.44	2.08
Enrollment status in degree program in 2009—Master's	B1ENRST = 4	1.08	0.15	0.10	10,750	1.51	2.29
Highest degree program enrollment after bachelor's degree, as of 2009—Master's	B1HIENR = 5	18.60	0.58	0.38	10,750	1.55	2.39
Number of jobs held since bachelor's degree—One	B1NMJBG = 1	48.79	0.75	0.50	10,180	1.52	2.32
Employment status in 2009—One job	B1LFP09 = 1, 2, 3, 4	70.44	0.65	0.44	10,750	1.47	2.16
Satisfied with employment in 2009: Compensation	B1JBPAY = 1	56.88	0.76	0.52	9,000	1.46	2.13
Employer benefits in 2009 offered medical or health insurance	B1EMPMI = 1	75.52	0.64	0.46	8,800	1.39	1.92
Job not part of career in industry	B1CARIND = 0	15.21	0.67	0.44	6,680	1.53	2.34
Job unrelated to major	B1NSF19B = 0	26.35	0.71	0.46	9,000	1.52	2.31
Highest education attained by either parent—Bachelor's degree	PAREduc = 7	28.16	0.63	0.43	10,750	1.44	2.08
Age at bachelor's degree receipt	AGEATBA (mean)	24.90	0.11	0.06	10,750	1.70	2.87
Had disability in 2007–08	DISABLE = 1	8.35	0.41	0.27	10,750	1.55	2.42
Marital status and dependents—Unmarried with no dependents	B1MARCH = 1	65.95	0.75	0.46	10,750	1.65	2.71
Volunteered in last 12 months as of 2009	B1COMSRV = 1	41.22	0.67	0.47	10,750	1.42	2.01
Ever voted as of 2009	B1EVRVT = 1	89.96	0.47	0.29	10,750	1.63	2.64
Cumulative total amount borrowed	B1BORAT (mean)	\$ 15,972.33	250.74	180.54	10,750	1.39	1.93
Cumulative amount owed as of 2008–09	B1OWAMT1 (mean)	23,866.95	356.93	226.28	7,820	1.58	2.49
Cumulative federal amount borrowed	FEDCUM1 (mean)	10,814.02	162.90	113.72	10,750	1.43	2.05
Earned income in 2009	B1ERNINC (mean)	29,701.68	370.79	237.07	10,750	1.56	2.45
Summary statistics							
Mean	†	†	†	†	†	1.52	2.32
Minimum	†	†	†	†	†	1.24	1.54
25th percentile	†	†	†	†	†	1.44	2.08
Median	†	†	†	†	†	1.52	2.31
75th percentile	†	†	†	†	†	1.58	2.49
Maximum	†	†	†	†	†	1.75	3.05

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis.

GPA = grade point average. STEM = science, technology, engineering, and mathematics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-6. Design effects for selected variables using the B&B:08/09 interview weight (WTA000) for Black students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Bachelor's degree major—STEM major	MAJORS4Y = 1, 2, 3	15.35	1.54	0.96	1,400	1.60	2.56
Cumulative undergraduate grade point average	GPA (mean)	303.81	1.98	1.27	1,400	1.56	2.43
First institution sector—2-year or less	I1SECT = 2, 3, 5, 6, 8, 9	29.38	1.79	1.24	1,360	1.45	2.10
Number of institutions attended before bachelor's completion	NUMINST > 1	58.11	1.97	1.32	1,400	1.49	2.23
Time to 2007–08 bachelor's degree	PSE_BA (mean time in months)	106.36	4.64	2.46	1,400	1.88	3.55
Debt burden in 2008–09	B1EDPCT (mean)	5.82	0.62	0.38	920	1.64	2.70
Ever received Pell Grant	PELLYRS = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	63.12	2.37	1.29	1,400	1.84	3.39
Loan status in 2008–09—Not repaying	LNSTATUS = 1, 2, 3	30.65	2.08	1.23	1,400	1.69	2.86
Enrollment status in degree program in 2009—Master's	B1ENRST = 4	0.50	0.34	0.19	1,400	1.80	3.23
Highest degree program enrollment after bachelor's degree, as of 2009—Master's	B1HIENR = 5	26.12	1.86	1.17	1,400	1.59	2.52
Number of jobs held since bachelor's degree—One	B1NMJBG = 1	54.37	2.04	1.38	1,310	1.48	2.20
Employment status in 2009—One job	B1LFP09 = 1, 2, 3, 4	70.61	1.78	1.22	1,400	1.46	2.13
Satisfied with employment in 2009: Compensation	B1JBPAY = 1	49.99	2.37	1.50	1,110	1.58	2.49
Employer benefits in 2009 offered medical or health insurance	B1EMPMI = 1	79.19	1.72	1.23	1,090	1.40	1.96
Job not part of career in industry	B1CARIND = 0	20.24	2.18	1.45	770	1.50	2.24
Job unrelated to major	B1NSF19B = 0	29.56	2.00	1.37	1,110	1.46	2.13
Highest education attained by either parent—Bachelor's degree	PAREduc = 7	16.39	1.62	0.99	1,400	1.64	2.67
Age at bachelor's degree receipt	AGEATBA (mean)	28.69	0.45	0.25	1,400	1.80	3.26
Had disability in 2007–08	DISABLE = 1	8.48	1.10	0.74	1,400	1.48	2.19
Marital status and dependents—Unmarried with no dependents	B1MARCH = 1	56.34	2.13	1.32	1,400	1.61	2.59
Volunteered in last 12 months as of 2009	B1COMSRV = 1	43.71	2.12	1.32	1,400	1.60	2.57
Ever voted as of 2009	B1EVRVT = 1	87.07	1.62	0.90	1,400	1.81	3.26
Cumulative total amount borrowed	B1BORAT (mean)	\$ 22,880.83	787.57	507.11	1,400	1.55	2.41
Cumulative amount owed as of 2008–09	B1OWAMT1 (mean)	29,384.78	881.13	560.47	1,190	1.57	2.47
Cumulative federal amount borrowed	FEDCUM1 (mean)	18,357.09	610.35	411.68	1,400	1.48	2.20
Earned income in 2009	B1ERNINC (mean)	28,431.08	984.25	608.93	1,400	1.62	2.61
Summary statistics							
Mean	†	†	†	†	†	1.60	2.58
Minimum	†	†	†	†	†	1.40	1.96
25th percentile	†	†	†	†	†	1.48	2.20
Median	†	†	†	†	†	1.58	2.50
75th percentile	†	†	†	†	†	1.64	2.70
Maximum	†	†	†	†	†	1.88	3.55

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis.

GPA = grade point average. STEM = science, technology, engineering, and mathematics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-7. Design effects for selected variables using the B&B:08/09 interview weight (WTA000) for Hispanic students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Bachelor's degree major—STEM major	MAJORS4Y = 1, 2, 3	13.25	1.35	0.91	1,390	1.48	2.20
Cumulative undergraduate grade point average	GPA (mean)	315.36	1.94	1.21	1,390	1.60	2.57
First institution sector—2-year or less	I1SECT = 2, 3, 5, 6, 8, 9	36.19	2.26	1.31	1,350	1.73	2.98
Number of institutions attended before bachelor's completion	NUMINST > 1	60.85	2.09	1.31	1,390	1.59	2.54
Time to 2007–08 bachelor's degree	PSE_BA (mean time in months)	82.73	2.16	1.63	1,390	1.33	1.77
Debt burden in 2008–09	B1EDPCT (mean)	9.68	1.38	0.80	800	1.73	3.00
Ever received Pell Grant	PELLYRS = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	57.53	2.28	1.33	1,390	1.72	2.95
Loan status in 2008–09—Not repaying	LNSTATUS = 1, 2, 3	20.12	1.40	1.08	1,390	1.30	1.70
Enrollment status in degree program in 2009—Master's	B1ENRST = 4	1.94	0.60	0.37	1,390	1.61	2.59
Highest degree program enrollment after bachelor's degree, as of 2009—Master's	B1HIENR = 5	18.99	1.81	1.05	1,390	1.72	2.96
Number of jobs held since bachelor's degree—One	B1NMJBG = 1	51.89	2.18	1.41	1,260	1.55	2.39
Employment status in 2009—One job	B1LFP09 = 1, 2, 3, 4	72.51	1.68	1.20	1,390	1.40	1.97
Satisfied with employment in 2009: Compensation	B1JBPAY = 1	53.47	2.32	1.51	1,080	1.53	2.34
Employer benefits in 2009 offered medical or health insurance	B1EMPMI = 1	77.17	1.88	1.29	1,060	1.46	2.12
Job not part of career in industry	B1CARIND = 0	20.49	2.41	1.47	760	1.64	2.70
Job unrelated to major	B1NSF19B = 0	32.01	2.15	1.42	1,080	1.52	2.31
Highest education attained by either parent—Bachelor's degree	PAREduc = 7	17.63	1.54	1.02	1,390	1.51	2.27
Age at bachelor's degree receipt	AGEATBA (mean)	25.71	0.24	0.17	1,390	1.43	2.03
Had disability in 2007–08	DISABLE = 1	6.12	0.96	0.64	1,390	1.49	2.21
Marital status and dependents—Unmarried with no dependents	B1MARCH = 1	61.41	1.78	1.31	1,390	1.36	1.85
Volunteered in last 12 months as of 2009	B1COMSRV = 1	35.80	1.90	1.29	1,390	1.48	2.19
Ever voted as of 2009	B1EVRVT = 1	84.45	1.45	0.97	1,390	1.49	2.23
Cumulative total amount borrowed	B1BORAT (mean)	\$ 15,277.61	767.09	489.76	1,390	1.57	2.45
Cumulative amount owed as of 2008–09	B1OWAMT1 (mean)	22,390.74	963.95	616.17	1,040	1.56	2.45
Cumulative federal amount borrowed	FEDCUM1 (mean)	11,003.06	596.60	334.61	1,390	1.78	3.18
Earned income in 2009	B1ERNINC (mean)	26,798.99	822.72	570.16	1,390	1.44	2.08
Summary statistics							
Mean	†	†	†	†	†	1.54	2.39
Minimum	†	†	†	†	†	1.30	1.70
25th percentile	†	†	†	†	†	1.46	2.12
Median	†	†	†	†	†	1.53	2.33
75th percentile	†	†	†	†	†	1.61	2.59
Maximum	†	†	†	†	†	1.78	3.18

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis.

GPA = grade point average. STEM = science, technology, engineering, and mathematics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-8. Design effects for selected variables using the B&B:08/09 interview weight (WTA000) for Asian students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Bachelor's degree major—STEM major	MAJORS4Y = 1, 2, 3	31.43	2.30	1.47	990	1.56	2.44
Cumulative undergraduate grade point average	GPA (mean)	327.17	2.37	1.47	990	1.61	2.61
First institution sector—2-year or less	I1SECT = 2, 3, 5, 6, 8, 9	32.04	2.62	1.53	930	1.71	2.93
Number of institutions attended before bachelor's completion	NUMINST > 1	54.62	2.79	1.58	990	1.77	3.12
Time to 2007–08 bachelor's degree	PSE_BA (mean time in months)	61.08	1.66	1.13	990	1.46	2.14
Debt burden in 2008–09	B1EDPCT (mean)	12.08	2.84	1.54	390	1.84	3.39
Ever received Pell Grant	PELLYRS = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	40.84	2.71	1.56	990	1.74	3.01
Loan status in 2008–09—Not repaying	LNSTATUS = 1, 2, 3	14.26	1.55	1.11	990	1.40	1.95
Enrollment status in degree program in 2009—Master's	B1ENRST = 4	1.17	0.52	0.34	990	1.52	2.31
Highest degree program enrollment after bachelor's degree, as of 2009—Master's	B1HIENR = 5	17.90	1.76	1.22	990	1.45	2.10
Number of jobs held since bachelor's degree—One	B1NMJBG = 1	62.13	2.86	1.69	820	1.69	2.87
Employment status in 2009—One job	B1LFP09 = 1, 2, 3, 4	63.81	2.74	1.52	990	1.80	3.23
Satisfied with employment in 2009: Compensation	B1JBPAY = 1	57.49	3.06	1.93	660	1.59	2.53
Employer benefits in 2009 offered medical or health insurance	B1EMPMI = 1	78.69	2.46	1.61	650	1.53	2.34
Job not part of career in industry	B1CARIND = 0	17.70	2.99	1.71	500	1.76	3.08
Job unrelated to major	B1NSF19B = 0	22.45	2.77	1.63	660	1.70	2.90
Highest education attained by either parent—Bachelor's degree	PAREduc = 7	25.35	2.18	1.38	990	1.58	2.49
Age at bachelor's degree receipt	AGEATBA (mean)	23.47	0.21	0.14	990	1.56	2.43
Had disability in 2007–08	DISABLE = 1	7.87	1.61	0.85	990	1.89	3.57
Marital status and dependents—Unmarried with no dependents	B1MARCH = 1	80.08	2.10	1.27	990	1.66	2.75
Volunteered in last 12 months as of 2009	B1COMSRV = 1	42.60	2.30	1.57	990	1.47	2.16
Ever voted as of 2009	B1EVRVT = 1	63.85	2.51	1.52	990	1.65	2.71
Cumulative total amount borrowed	B1BORAT (mean)	\$ 11,336.98	839.70	535.33	990	1.57	2.46
Cumulative amount owed as of 2008–09	B1OWAMT1 (mean)	19,506.55	1,225.89	773.21	630	1.59	2.51
Cumulative federal amount borrowed	FEDCUM1 (mean)	6,947.45	498.05	306.42	990	1.63	2.64
Earned income in 2009	B1ERNINC (mean)	26,623.45	1,315.87	765.73	990	1.72	2.95
Summary statistics							
Mean	†	†	†	†	†	1.63	2.68
Minimum	†	†	†	†	†	1.40	1.95
25th percentile	†	†	†	†	†	1.56	2.43
Median	†	†	†	†	†	1.62	2.62
75th percentile	†	†	†	†	†	1.72	2.95
Maximum	†	†	†	†	†	1.89	3.57

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis.

GPA = grade point average. STEM = science, technology, engineering, and mathematics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-9. Design effects for selected variables using the B&B:08/09 interview weight (WTA000) for other race students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Bachelor's degree major—STEM major	MAJORS4Y = 1, 2, 3	12.47	2.04	1.46	510	1.40	1.96
Cumulative undergraduate grade point average	GPA (mean)	324.61	3.06	2.07	510	1.48	2.19
First institution sector—2-year or less	I1SECT = 2, 3, 5, 6, 8, 9	38.25	4.01	2.20	490	1.83	3.34
Number of institutions attended before bachelor's completion	NUMINST > 1	60.97	3.62	2.16	510	1.68	2.82
Time to 2007–08 bachelor's degree	PSE_BA (mean time in months)	87.16	5.51	3.31	510	1.67	2.77
Debt burden in 2008–09	B1EDPCT (mean)	8.08	1.21	0.83	310	1.46	2.13
Ever received Pell Grant	PELLYRS = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	48.65	3.44	2.21	510	1.56	2.42
Loan status in 2008–09—Not repaying	LNSTATUS = 1, 2, 3	20.87	2.45	1.80	510	1.37	1.87
Enrollment status in degree program in 2009—Master's	B1ENRST = 4	0.70	0.41	0.37	510	1.13	1.27
Highest degree program enrollment after bachelor's degree, as of 2009—Master's	B1HIENR = 5	22.47	2.68	1.84	510	1.46	2.12
Number of jobs held since bachelor's degree—One	B1NMJBG = 1	44.12	3.26	2.27	480	1.44	2.06
Employment status in 2009—One job	B1LFP09 = 1, 2, 3, 4	70.81	3.27	2.01	510	1.63	2.65
Satisfied with employment in 2009: Compensation	B1JBPAY = 1	51.67	4.17	2.42	430	1.72	2.96
Employer benefits in 2009 offered medical or health insurance	B1EMPMI = 1	79.98	2.82	1.96	420	1.44	2.08
Job not part of career in industry	B1CARIND = 0	22.92	3.90	2.41	310	1.62	2.63
Job unrelated to major	B1NSF19B = 0	32.23	3.63	2.27	430	1.60	2.56
Highest education attained by either parent—Bachelor's degree	PAREduc = 7	30.25	3.45	2.03	510	1.70	2.89
Age at bachelor's degree receipt	AGEATBA (mean)	26.23	0.57	0.34	510	1.67	2.80
Had disability in 2007–08	DISABLE = 1	11.48	2.28	1.41	510	1.62	2.62
Marital status and dependents—Unmarried with no dependents	B1MARCH = 1	59.64	3.50	2.17	510	1.61	2.61
Volunteered in last 12 months as of 2009	B1COMSRV = 1	37.73	2.96	2.14	510	1.38	1.92
Ever voted as of 2009	B1EVRVT = 1	83.60	2.59	1.64	510	1.58	2.51
Cumulative total amount borrowed	B1BORAT (mean)	\$ 17,715.62	1,214.11	872.25	510	1.39	1.94
Cumulative amount owed as of 2008–09	B1OWAMT1 (mean)	25,014.38	1,697.79	1,078.48	390	1.57	2.48
Cumulative federal amount borrowed	FEDCUM1 (mean)	11,924.92	778.98	552.55	510	1.41	1.99
Earned income in 2009	B1ERNINC (mean)	29,788.46	1,519.58	1,088.16	510	1.40	1.95
Summary statistics							
Mean	†	†	†	†	†	1.53	2.37
Minimum	†	†	†	†	†	1.13	1.27
25th percentile	†	†	†	†	†	1.41	1.99
Median	†	†	†	†	†	1.57	2.45
75th percentile	†	†	†	†	†	1.63	2.65
Maximum	†	†	†	†	†	1.83	3.34

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).

² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis.

GPA = grade point average. STEM = science, technology, engineering, and mathematics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-10. Design effects for selected variables using the B&B:08/09 interview weight (WTA000) for male students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Bachelor's degree major—STEM major	MAJORS4Y = 1, 2, 3	25.64	0.63	0.55	6,230	1.14	1.29
Cumulative undergraduate grade point average	GPA (mean)	319.46	1.08	0.62	6,230	1.74	3.03
First institution sector—2-year or less	I1SECT = 2, 3, 5, 6, 8, 9	27.59	0.90	0.57	6,050	1.56	2.43
Number of institutions attended before bachelor's completion	NUMINST > 1	51.33	1.06	0.63	6,230	1.67	2.79
Time to 2007–08 bachelor's degree	PSE_BA (mean time in months)	77.85	1.46	0.84	6,230	1.73	2.99
Debt burden in 2008–09	B1EDPCT (mean)	8.78	0.41	0.28	3,490	1.44	2.06
Ever received Pell Grant	PELLYRS = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	35.14	0.93	0.61	6,230	1.53	2.34
Loan status in 2008–09—Not repaying	LNSTATUS = 1, 2, 3	15.35	0.73	0.46	6,230	1.59	2.53
Enrollment status in degree program in 2009—Master's	B1ENRST = 4	1.08	0.20	0.13	6,230	1.49	2.23
Highest degree program enrollment after bachelor's degree, as of 2009—Master's	B1HIENR = 5	17.25	0.83	0.48	6,230	1.74	3.02
Number of jobs held since bachelor's degree—One	B1NMJBG = 1	54.41	1.15	0.65	5,820	1.76	3.10
Employment status in 2009—One job	B1LFP09 = 1, 2, 3, 4	71.68	0.84	0.57	6,230	1.47	2.17
Satisfied with employment in 2009: Compensation	B1JBPAY = 1	58.39	1.09	0.69	5,070	1.57	2.47
Employer benefits in 2009 offered medical or health insurance	B1EMPMI = 1	77.40	0.96	0.59	4,940	1.61	2.60
Job not part of career in industry	B1CARIND = 0	15.65	0.94	0.59	3,780	1.59	2.52
Job unrelated to major	B1NSF19B = 0	26.15	0.95	0.62	5,070	1.54	2.38
Highest education attained by either parent—Bachelor's degree	PAREduc = 7	28.02	0.92	0.57	6,230	1.61	2.61
Age at bachelor's degree receipt	AGEATBA (mean)	25.13	0.14	0.08	6,230	1.68	2.82
Had disability in 2007–08	DISABLE = 1	8.13	0.52	0.35	6,230	1.49	2.23
Marital status and dependents—Unmarried with no dependents	B1MARCH = 1	69.43	1.00	0.58	6,230	1.71	2.92
Volunteered in last 12 months as of 2009	B1COMSRV = 1	37.82	0.91	0.61	6,230	1.48	2.19
Ever voted as of 2009	B1EVRVT = 1	85.18	0.72	0.45	6,230	1.59	2.53
Cumulative total amount borrowed	B1BORAT (mean)	\$ 15,105.10	352.61	231.74	6,230	1.52	2.32
Cumulative amount owed as of 2008–09	B1OWAMT1 (mean)	23,225.22	471.37	297.01	4,490	1.59	2.52
Cumulative federal amount borrowed	FEDCUM1 (mean)	10,495.89	228.76	152.68	6,230	1.50	2.24
Earned income in 2009	B1ERNINC (mean)	32,494.06	597.43	348.52	6,230	1.71	2.94
Summary statistics							
Mean	†	†	†	†	†	1.58	2.51
Minimum	†	†	†	†	†	1.14	1.29
25th percentile	†	†	†	†	†	1.50	2.24
Median	†	†	†	†	†	1.59	2.52
75th percentile	†	†	†	†	†	1.68	2.82
Maximum	†	†	†	†	†	1.76	3.10

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis.

GPA = grade point average. STEM = science, technology, engineering, and mathematics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-11. Design effects for selected variables using the B&B:08/09 interview weight (WTA000) for female students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Bachelor's degree major—STEM major	MAJORS4Y = 1, 2, 3	9.61	0.42	0.31	8,820	1.34	1.78
Cumulative undergraduate grade point average	GPA (mean)	331.25	0.75	0.49	8,820	1.53	2.34
First institution sector—2-year or less	I1SECT = 2, 3, 5, 6, 8, 9	31.49	0.74	0.51	8,450	1.46	2.13
Number of institutions attended before bachelor's completion	NUMINST > 1	57.90	0.84	0.53	8,820	1.60	2.57
Time to 2007–08 bachelor's degree	PSE_BA (mean time in months)	79.35	1.23	0.76	8,820	1.61	2.60
Debt burden in 2008–09	B1EDPCT (mean)	9.49	0.34	0.23	5,190	1.51	2.28
Ever received Pell Grant	PELLYRS = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	38.71	0.83	0.52	8,820	1.60	2.55
Loan status in 2008–09—Not repaying	LNSTATUS = 1, 2, 3	19.55	0.58	0.42	8,820	1.37	1.87
Enrollment status in degree program in 2009—Master's	B1ENRST = 4	1.12	0.17	0.11	8,820	1.53	2.33
Highest degree program enrollment after bachelor's degree, as of 2009—Master's	B1HIENR = 5	20.95	0.61	0.43	8,820	1.42	2.01
Number of jobs held since bachelor's degree—One	B1NMJBG = 1	46.97	0.75	0.55	8,230	1.36	1.84
Employment status in 2009—One job	B1LFP09 = 1, 2, 3, 4	69.23	0.69	0.49	8,820	1.40	1.96
Satisfied with employment in 2009: Compensation	B1JBPAY = 1	53.95	0.91	0.59	7,200	1.56	2.42
Employer benefits in 2009 offered medical or health insurance	B1EMPMI = 1	75.49	0.70	0.51	7,070	1.37	1.88
Job not part of career in industry	B1CARIND = 0	17.06	0.76	0.52	5,230	1.47	2.15
Job unrelated to major	B1NSF19B = 0	27.88	0.79	0.53	7,200	1.49	2.22
Highest education attained by either parent—Bachelor's degree	PAREduc = 7	24.57	0.65	0.46	8,820	1.41	2.00
Age at bachelor's degree receipt	AGEATBA (mean)	25.38	0.13	0.08	8,820	1.67	2.78
Had disability in 2007–08	DISABLE = 1	8.29	0.43	0.29	8,820	1.46	2.14
Marital status and dependents—Unmarried with no dependents	B1MARCH = 1	62.26	0.81	0.52	8,820	1.56	2.44
Volunteered in last 12 months as of 2009	B1COMSRV = 1	43.17	0.81	0.53	8,820	1.54	2.38
Ever voted as of 2009	B1EVRVT = 1	89.12	0.53	0.33	8,820	1.59	2.53
Cumulative total amount borrowed	B1BORAT (mean)	\$ 17,178.20	302.21	203.15	8,820	1.49	2.21
Cumulative amount owed as of 2008–09	B1OWAMT1 (mean)	24,770.75	406.46	248.10	6,580	1.64	2.68
Cumulative federal amount borrowed	FEDCUM1 (mean)	11,899.24	210.94	133.65	8,820	1.58	2.49
Earned income in 2009	B1ERNINC (mean)	26,670.43	332.88	223.33	8,820	1.49	2.22
Summary statistics							
Mean	†	†	†	†	†	1.50	2.26
Minimum	†	†	†	†	†	1.34	1.78
25th percentile	†	†	†	†	†	1.42	2.01
Median	†	†	†	†	†	1.50	2.25
75th percentile	†	†	†	†	†	1.58	2.49
Maximum	†	†	†	†	†	1.67	2.78

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).

² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis.

GPA = grade point average. STEM = science, technology, engineering, and mathematics.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-12. Design effects for selected variables using the B&B:08/09 transcript weight (WTB000) for all students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Total number of undergraduate courses	QEUGCRS (mean)	44.76	0.20	0.11	15,960	1.82	3.32
NPSAS bachelor's degree field of study: business	QF11FBAC = 9	22.97	0.25	0.34	15,680	0.75	0.57
NPSAS Bachelor's degree was with honors	QFHDGHON = 1	27.52	0.56	0.35	16,070	1.60	2.55
Elapsed time from entry to NPSAS bachelor's degree	QDFA2BCH (mean)	49.54	0.43	0.27	15,870	1.62	2.62
Number of repeated courses	QETCSRPT (mean)	0.60	0.02	0.02	15,960	1.44	2.07
Remedial courses: number taken	QETOTR (mean)	0.50	0.02	0.01	15,960	1.77	3.13
Total noncourse credits	QBTLNCCR (mean)	2.08	0.08	0.05	15,710	1.62	2.64
Total AP credits awarded by institution	QBTLAPCR (mean)	1.07	0.04	0.03	15,850	1.30	1.70
Military training/experience course credit	QBNMMLCR (mean)	0.15	0.05	0.02	15,930	2.58	6.68
Transfer credits accepted by NPSAS institution	QETRNACC (mean)	16.55	0.43	0.23	14,580	1.83	3.36
First year enrollment: credits earned	QE1STERN (mean)	27.71	0.12	0.08	15,720	1.57	2.47
Per-year average: credits earned	QEAVGERN (mean)	26.81	0.09	0.06	15,720	1.52	2.32
Fine arts, includes graphic arts and design: credits earned	QEFARERN (mean)	7.88	0.20	0.13	15,910	1.55	2.40
Nursing: credits earned	QENRSERN (mean)	2.33	0.10	0.09	15,960	1.15	1.32
Study abroad: credits earned	QESABERN (mean)	0.68	0.04	0.03	15,920	1.49	2.21
STEM: credits earned	QESTMERN (mean)	26.09	0.25	0.22	15,900	1.12	1.26
Non-STEM: credits earned	QENSTERN (mean)	95.85	0.43	0.26	15,910	1.65	2.73
First-second years: credits earned	QE12ERN (mean)	54.72	0.22	0.14	15,720	1.57	2.47
Computer science: credits attempted	QECSCATT (mean)	3.19	0.07	0.06	15,920	1.19	1.42
Student teaching: credits attempted	QESTTATT (mean)	0.76	0.03	0.02	15,920	1.10	1.21
Non-science & engineering: number taken	QENSENUM (mean)	38.62	0.19	0.11	15,960	1.77	3.12
Science & engineering: number taken	QESERNUM (mean)	5.52	0.07	0.06	15,960	1.10	1.21
Sports/PE/recreation: GPA	QESPTGPA (mean)	3.61	0.01	0.01	5,640	1.62	2.64
Social sciences: GPA	QESSCGPA (mean)	3.16	0.01	0.01	14,530	1.66	2.77
GPA in fourth year of attendance	QEYR4GPA (mean)	3.26	0.01	0.01	10,930	1.48	2.18
Summary statistics							
Mean	†	†	†	†	†	1.52	2.42
Minimum	†	†	†	†	†	0.75	0.57
25th percentile	†	†	†	†	†	1.30	1.70
Median	†	†	†	†	†	1.57	2.47
75th percentile	†	†	†	†	†	1.65	2.73
Maximum	†	†	†	†	†	2.58	6.68

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).

² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis.

NPSAS = National Postsecondary Student Aid Study. AP = advanced placement. STEM = science, technology, engineering, and mathematics. PE = physical education. GPA = grade point average.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-13. Design effects for selected variables using the B&B:08/09 combined weight (WTC000) for all students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Total number of undergraduate courses	QEUGCRS (mean)	44.75	0.23	0.12	13,920	1.90	3.62
NPSAS Bachelor's degree field of study: business	QF11FBAC = 9	23.00	0.27	0.36	13,660	0.74	0.55
NPSAS Bachelor's degree was with honors	QFHDGHON = 1	27.95	0.60	0.38	14,010	1.57	2.47
Elapsed time from entry to NPSAS bachelor's degree	QDFA2BCH (mean)	49.07	0.44	0.27	13,830	1.60	2.55
Number of repeated courses	QETCSRPT (mean)	0.60	0.02	0.02	13,920	1.29	1.67
Remedial courses: number taken	QETOTR (mean)	0.49	0.02	0.01	13,920	1.80	3.25
Total noncourse credits	QBTLNCCR (mean)	2.14	0.08	0.06	13,700	1.48	2.19
Total AP credits awarded by institution	QBTLAPCR (mean)	1.10	0.05	0.04	13,820	1.34	1.81
Military training/experience course credit	QBNMMLCR (mean)	0.12	0.04	0.02	13,890	2.11	4.46
Transfer credits accepted by NPSAS institution	QETRNACC (mean)	16.76	0.47	0.25	12,710	1.85	3.43
First year enrollment: credits earned	QE1STERN (mean)	27.80	0.13	0.08	13,720	1.61	2.59
Per-year average: credits earned	QEAVGERN (mean)	26.85	0.10	0.06	13,720	1.60	2.56
Fine arts, includes graphic arts and design: credits earned	QEFARERN (mean)	7.77	0.20	0.14	13,880	1.46	2.12
Nursing: credits earned	QENRSERN (mean)	2.27	0.10	0.09	13,920	1.11	1.23
Study abroad: credits earned	QESABERN (mean)	0.71	0.05	0.03	13,890	1.60	2.56
STEM: credits earned	QESTMERN (mean)	26.23	0.28	0.24	13,870	1.17	1.37
Non-STEM: credits earned	QENSTERN (mean)	95.89	0.45	0.28	13,880	1.60	2.57
First-second years: credits earned	QE12ERN (mean)	54.81	0.24	0.15	13,710	1.66	2.77
Computer science: credits attempted	QECSCATT (mean)	3.19	0.08	0.07	13,880	1.24	1.53
Student teaching: credits attempted	QESTTATT (mean)	0.75	0.03	0.03	13,880	1.11	1.24
Non-science & engineering: number taken	QENSENUM (mean)	38.63	0.20	0.12	13,920	1.76	3.12
Science & engineering: number taken	QESERNUM (mean)	5.54	0.08	0.07	13,920	1.17	1.38
Sports/PE/recreation: GPA	QESPTGPA (mean)	3.62	0.01	0.01	4,950	1.68	2.83
Social sciences: GPA	QESSCGPA (mean)	3.17	0.01	0.01	12,690	1.55	2.39
GPA in fourth year of attendance	QEYR4GPA (mean)	3.28	0.01	0.01	9,560	1.55	2.40
Summary statistics							
Mean	†	†	†	†	†	1.50	2.35
Minimum	†	†	†	†	†	0.74	0.55
25th percentile	†	†	†	†	†	1.29	1.67
Median	†	†	†	†	†	1.57	2.47
75th percentile	†	†	†	†	†	1.66	2.77
Maximum	†	†	†	†	†	2.11	4.46

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).

² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis.

NPSAS = National Postsecondary Student Aid Study. AP = advanced placement. STEM = science, technology, engineering, and mathematics. PE = physical education. GPA = grade point average.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-14. Design effects for selected variables using the B&B:08/09 combined weight (WTC000) for students whose base year institution was public: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Total number of undergraduate courses	QEUGCRS (mean)	46.32	0.30	0.16	8,050	1.90	3.59
NPSAS Bachelor's degree field of study: business	QF11FBAC = 9	19.94	0.52	0.45	7,890	1.15	1.31
NPSAS Bachelor's degree was with honors	QFHDGHON = 1	24.95	0.74	0.48	8,150	1.55	2.40
Elapsed time from entry to NPSAS bachelor's degree	QDFA2BCH (mean)	51.07	0.62	0.39	8,010	1.59	2.52
Number of repeated courses	QETCSRPT (mean)	0.73	0.03	0.03	8,050	1.28	1.63
Remedial courses: number taken	QETOTR (mean)	0.57	0.02	0.01	8,050	1.57	2.47
Total noncourse credits	QBTLNCCR (mean)	2.03	0.11	0.07	7,940	1.53	2.34
Total AP credits awarded by institution	QBTLAPCR (mean)	0.99	0.06	0.04	7,990	1.38	1.89
Military training/experience course credit	QBNMMLCR (mean)	0.09	0.05	0.02	8,040	2.12	4.49
Transfer credits accepted by NPSAS institution	QETRNACC (mean)	17.76	0.61	0.35	7,240	1.75	3.05
First year enrollment: credits earned	QE1STERN (mean)	27.40	0.14	0.11	8,040	1.35	1.81
Per-year average: credits earned	QEAVGERN (mean)	26.45	0.12	0.08	8,040	1.59	2.53
Fine arts, includes graphic arts and design: credits earned	QEFARERN (mean)	7.27	0.24	0.17	8,050	1.40	1.95
Nursing: credits earned	QENRSERN (mean)	2.05	0.14	0.12	8,050	1.20	1.44
Study abroad: credits earned	QESABERN (mean)	0.55	0.05	0.04	8,040	1.33	1.77
STEM: credits earned	QESTMERN (mean)	28.77	0.41	0.33	8,050	1.26	1.59
Non-STEM: credits earned	QENSTERN (mean)	95.67	0.59	0.38	8,050	1.54	2.38
First-second years: credits earned	QE12ERN (mean)	54.07	0.27	0.18	8,040	1.46	2.13
Computer science: credits attempted	QECSCATT (mean)	3.04	0.12	0.08	8,050	1.49	2.21
Student teaching: credits attempted	QESTTATT (mean)	0.88	0.04	0.04	8,030	1.23	1.52
Non-science & engineering: number taken	QENSENUM (mean)	39.32	0.27	0.16	8,050	1.71	2.94
Science & engineering: number taken	QESERNUM (mean)	6.41	0.12	0.09	8,050	1.26	1.59
Sports/PE/recreation: GPA	QESPTGPA (mean)	3.61	0.02	0.01	3,110	1.44	2.08
Social sciences: GPA	QESSCGPA (mean)	3.12	0.01	0.01	7,470	1.39	1.92
GPA in fourth year of attendance	QEYR4GPA (mean)	3.22	0.01	0.01	5,530	1.46	2.12
Summary statistics							
Mean	†	†	†	†	†	1.48	2.23
Minimum	†	†	†	†	†	1.15	1.31
25th percentile	†	†	†	†	†	1.33	1.77
Median	†	†	†	†	†	1.46	2.12
75th percentile	†	†	†	†	†	1.57	2.47
Maximum	†	†	†	†	†	2.12	4.49

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis.

NPSAS = National Postsecondary Student Aid Study. AP = advanced placement. STEM = science, technology, engineering, and mathematics. PE = physical education. GPA = grade point average.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-15. Design effects for selected variables using the B&B:08/09 combined weight (WTC000) for students whose base year institution was private nonprofit: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Total number of undergraduate courses	QEUGCRS (mean)	43.09	0.39	0.18	5,140	2.15	4.62
NPSAS Bachelor's degree field of study: business	QF11FBAC = 9	25.96	0.96	0.62	5,050	1.55	2.42
NPSAS Bachelor's degree was with honors	QFHDGHON = 1	35.76	1.02	0.67	5,140	1.53	2.34
Elapsed time from entry to NPSAS bachelor's degree	QDFA2BCH (mean)	46.33	0.56	0.36	5,110	1.55	2.41
Number of repeated courses	QETCSRPT (mean)	0.36	0.03	0.02	5,140	1.63	2.67
Remedial courses: number taken	QETOTR (mean)	0.33	0.03	0.01	5,140	2.15	4.63
Total noncourse credits	QBTLNCCR (mean)	2.45	0.15	0.09	5,040	1.60	2.57
Total AP credits awarded by institution	QBTLAPCR (mean)	1.48	0.10	0.07	5,100	1.51	2.27
Military training/experience course credit	QBNMMLCR (mean)	0.16	0.05	0.03	5,130	1.77	3.12
Transfer credits accepted by NPSAS institution	QETRACC (mean)	14.90	0.79	0.37	4,840	2.12	4.48
First year enrollment: credits earned	QE1STERN (mean)	27.78	0.25	0.12	5,080	2.00	4.00
Per-year average: credits earned	QEAVERGN (mean)	27.26	0.18	0.11	5,080	1.62	2.63
Fine arts, includes graphic arts and design: credits earned	QEFARERN (mean)	7.95	0.42	0.22	5,120	1.88	3.53
Nursing: credits earned	QENRSERN (mean)	2.74	0.21	0.16	5,140	1.33	1.77
Study abroad: credits earned	QESABERN (mean)	1.10	0.12	0.05	5,120	2.17	4.73
STEM: credits earned	QESTMERN (mean)	22.77	0.54	0.37	5,110	1.45	2.11
Non-STEM: credits earned	QENSTERN (mean)	97.25	0.84	0.43	5,110	1.98	3.91
First-second years: credits earned	QE12ERN (mean)	54.94	0.43	0.23	5,080	1.91	3.63
Computer science: credits attempted	QECSCATT (mean)	2.72	0.14	0.10	5,130	1.37	1.88
Student teaching: credits attempted	QESTTATT (mean)	0.62	0.05	0.04	5,130	1.38	1.90
Non-science & engineering: number taken	QENSENUM (mean)	38.02	0.36	0.18	5,140	2.00	4.01
Science & engineering: number taken	QESERNUM (mean)	4.56	0.14	0.10	5,140	1.40	1.95
Sports/PE/recreation: GPA	QESPTGPA (mean)	3.65	0.03	0.01	1,840	2.13	4.54
Social sciences: GPA	QESSCGPA (mean)	3.27	0.01	0.01	4,680	1.56	2.44
GPA in fourth year of attendance	QEYR4GPA (mean)	3.38	0.01	0.01	3,770	1.69	2.86
Summary statistics							
Mean	†	†	†	†	†	1.74	3.10
Minimum	†	†	†	†	†	1.33	1.77
25th percentile	†	†	†	†	†	1.53	2.34
Median	†	†	†	†	†	1.63	2.67
75th percentile	†	†	†	†	†	2.00	4.00
Maximum	†	†	†	†	†	2.17	4.73

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis. NPSAS = National Postsecondary Student Aid Study. AP = advanced placement. STEM = science, technology, engineering, and mathematics. PE = physical education. GPA = grade point average.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-16. Design effects for selected variables using the B&B:08/09 combined weight (WTC000) for students whose base year institution was private for-profit: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Total number of undergraduate courses	QEUGCRS (mean)	35.09	0.75	0.45	730	1.65	2.73
NPSAS Bachelor's degree field of study: business	QF11FBAC = 9	43.15	3.36	1.84	720	1.83	3.33
NPSAS Bachelor's degree was with honors	QFHDGHON = 1	13.80	2.52	1.28	730	1.97	3.88
Elapsed time from entry to NPSAS bachelor's degree	QDFA2BCH (mean)	41.13	2.19	1.00	710	2.18	4.77
Number of repeated courses	QETCSRPT (mean)	0.51	0.07	0.06	730	1.32	1.74
Remedial courses: number taken	QETOTR (mean)	0.61	0.10	0.04	730	2.73	7.44
Total noncourse credits	QBTLNCCR (mean)	1.34	0.27	0.14	720	1.94	3.74
Total AP credits awarded by institution	QBTLAPCR (mean)	0.00	0.00	0.00	730	0.36	0.13
Military training/experience course credit	QBNMMLCR (mean)	0.24	0.09	0.06	720	1.48	2.18
Transfer credits accepted by NPSAS institution	QETRACC (mean)	16.61	2.02	0.92	630	2.19	4.81
First year enrollment: credits earned	QE1STERN (mean)	35.56	1.88	0.66	590	2.85	8.10
Per-year average: credits earned	QEAVERGN (mean)	30.44	1.42	0.52	590	2.75	7.56
Fine arts, includes graphic arts and design: credits earned	QEFARERN (mean)	13.18	2.46	0.96	710	2.58	6.64
Nursing: credits earned	QENRSERN (mean)	2.01	0.79	0.34	730	2.32	5.39
Study abroad: credits earned	QESABERN (mean)	0.00	0.00	0.00	730	0.56	0.31
STEM: credits earned	QESTMERN (mean)	15.90	1.50	0.65	710	2.29	5.24
Non-STEM: credits earned	QENSTERN (mean)	89.34	2.48	1.40	720	1.77	3.12
First-second years: credits earned	QE12ERN (mean)	67.66	3.23	1.19	590	2.72	7.41
Computer science: credits attempted	QECSCATT (mean)	8.58	0.99	0.56	710	1.76	3.09
Student teaching: credits attempted	QESTTATT (mean)	†	†	†	†	†	†
Non-science & engineering: number taken	QENSENUM (mean)	33.47	0.73	0.45	730	1.62	2.62
Science & engineering: number taken	QESERNUM (mean)	0.67	0.13	0.06	730	2.21	4.89
Sports/PE/recreation: GPA	QESPTGPA (mean)	†	†	†	†	†	†
Social sciences: GPA	QESSCGPA (mean)	3.27	0.07	0.03	550	2.11	4.46
GPA in fourth year of attendance	QEYR4GPA (mean)	3.28	0.10	0.05	260	2.08	4.32
Summary statistics							
Mean	†	†	†	†	†	1.97	4.26
Minimum	†	†	†	†	†	0.36	0.13
25th percentile	†	†	†	†	†	1.65	2.73
Median	†	†	†	†	†	2.08	4.32
75th percentile	†	†	†	†	†	2.32	5.39
Maximum	†	†	†	†	†	2.85	8.10

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis. NPSAS = National Postsecondary Student Aid Study. AP = advanced placement. STEM = science, technology, engineering, and mathematics. PE = physical education. GPA = grade point average.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-17. Design effects for selected variables using the B&B:08/09 combined weight (WTC000) for White students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Total number of undergraduate courses	QEUGCRS (mean)	44.94	0.24	0.14	9,960	1.73	2.98
NPSAS Bachelor's degree field of study: business	QF11FBAC = 9	21.73	0.47	0.42	9,780	1.13	1.28
NPSAS Bachelor's degree was with honors	QFHDGHON = 1	30.90	0.72	0.46	10,040	1.57	2.47
Elapsed time from entry to NPSAS bachelor's degree	QDFA2BCH (mean)	48.80	0.48	0.32	9,900	1.51	2.29
Number of repeated courses	QETCSRPT (mean)	0.50	0.03	0.02	9,960	1.37	1.87
Remedial courses: number taken	QETOTR (mean)	0.39	0.02	0.01	9,960	1.88	3.54
Total noncourse credits	QBTLNCCR (mean)	2.18	0.10	0.07	9,810	1.51	2.27
Total AP credits awarded by institution	QBTLAPCR (mean)	1.14	0.06	0.04	9,900	1.39	1.92
Military training/experience course credit	QBNMMLCR (mean)	0.13	0.05	0.02	9,940	2.12	4.50
Transfer credits accepted by NPSAS institution	QETRNAACC (mean)	16.23	0.50	0.29	9,090	1.70	2.89
First year enrollment: credits earned	QE1STERN (mean)	28.05	0.15	0.10	9,840	1.59	2.53
Per-year average: credits earned	QEAVERGN (mean)	27.09	0.11	0.08	9,840	1.51	2.27
Fine arts, includes graphic arts and design: credits earned	QEFARERN (mean)	8.23	0.25	0.17	9,940	1.49	2.21
Nursing: credits earned	QENRSERN (mean)	2.28	0.13	0.11	9,960	1.16	1.34
Study abroad: credits earned	QESABERN (mean)	0.83	0.06	0.04	9,930	1.56	2.43
STEM: credits earned	QESTMERN (mean)	26.06	0.35	0.28	9,940	1.24	1.53
Non-STEM: credits earned	QENSTERN (mean)	96.88	0.51	0.33	9,940	1.55	2.40
First-second years: credits earned	QE12ERN (mean)	55.34	0.26	0.17	9,840	1.56	2.43
Computer science: credits attempted	QECSCATT (mean)	2.98	0.10	0.08	9,940	1.32	1.74
Student teaching: credits attempted	QESTTATT (mean)	0.91	0.04	0.03	9,920	1.07	1.15
Non-science & engineering: number taken	QENSENUM (mean)	38.93	0.23	0.14	9,960	1.66	2.75
Science & engineering: number taken	QESERNUM (mean)	5.46	0.09	0.08	9,960	1.16	1.35
Sports/PE/recreation: GPA	QESPTGPA (mean)	3.65	0.02	0.01	3,700	1.67	2.77
Social sciences: GPA	QESSCGPA (mean)	3.20	0.01	0.01	9,080	1.58	2.49
GPA in fourth year of attendance	QEYR4GPA (mean)	3.32	0.01	0.01	6,920	1.49	2.22
Summary statistics							
Mean	†	†	†	†	†	1.50	2.30
Minimum	†	†	†	†	†	1.07	1.15
25th percentile	†	†	†	†	†	1.37	1.87
Median	†	†	†	†	†	1.51	2.29
75th percentile	†	†	†	†	†	1.59	2.53
Maximum	†	†	†	†	†	2.12	4.50

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).

² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis. NPSAS = National Postsecondary Student Aid Study. AP = advanced placement. STEM = science, technology, engineering, and mathematics. PE = physical education. GPA = grade point average.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-18. Design effects for selected variables using the B&B:08/09 combined weight (WTC000) for Black students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Total number of undergraduate courses	QEUGCRS (mean)	44.83	0.71	0.42	1,290	1.69	2.85
NPSAS Bachelor's degree field of study: business	QF11FBAC = 9	32.77	1.90	1.31	1,280	1.45	2.09
NPSAS Bachelor's degree was with honors	QFHDGHON = 1	13.89	1.40	0.96	1,290	1.46	2.13
Elapsed time from entry to NPSAS bachelor's degree	QDFA2BCH (mean)	51.14	1.24	0.99	1,280	1.25	1.56
Number of repeated courses	QETCSRPT (mean)	0.86	0.10	0.08	1,290	1.34	1.79
Remedial courses: number taken	QETOTR (mean)	0.93	0.06	0.04	1,290	1.53	2.34
Total noncourse credits	QBTLNCCR (mean)	1.44	0.26	0.18	1,280	1.50	2.25
Total AP credits awarded by institution	QBTLAPCR (mean)	0.27	0.09	0.05	1,290	1.79	3.20
Military training/experience course credit	QBNMMLCR (mean)	0.19	0.09	0.05	1,280	1.83	3.35
Transfer credits accepted by NPSAS institution	QETRACC (mean)	21.40	1.58	0.97	1,180	1.62	2.62
First year enrollment: credits earned	QE1STERN (mean)	26.42	0.42	0.28	1,250	1.51	2.28
Per-year average: credits earned	QEAVERGN (mean)	25.55	0.34	0.23	1,250	1.51	2.29
Fine arts, includes graphic arts and design: credits earned	QEFARERN (mean)	5.51	0.40	0.30	1,270	1.33	1.76
Nursing: credits earned	QENRSERN (mean)	3.15	0.49	0.34	1,290	1.43	2.04
Study abroad: credits earned	QESABERN (mean)	0.17	0.06	0.04	1,290	1.48	2.20
STEM: credits earned	QESTMERN (mean)	24.62	1.10	0.72	1,270	1.53	2.35
Non-STEM: credits earned	QENSTERN (mean)	95.98	1.29	0.88	1,280	1.48	2.18
First-second years: credits earned	QE12ERN (mean)	51.74	0.77	0.50	1,250	1.53	2.33
Computer science: credits attempted	QECSCATT (mean)	4.66	0.49	0.31	1,270	1.59	2.53
Student teaching: credits attempted	QESTTATT (mean)	0.36	0.10	0.06	1,290	1.64	2.70
Non-science & engineering: number taken	QENSENUM (mean)	39.37	0.63	0.39	1,290	1.63	2.65
Science & engineering: number taken	QESERNUM (mean)	4.91	0.32	0.22	1,290	1.48	2.20
Sports/PE/recreation: GPA	QESPTGPA (mean)	3.49	0.05	0.03	460	1.58	2.51
Social sciences: GPA	QESSCGPA (mean)	3.00	0.02	0.02	1,170	1.35	1.83
GPA in fourth year of attendance	QEYR4GPA (mean)	2.97	0.04	0.02	810	1.65	2.74
Summary statistics							
Mean	†	†	†	†	†	1.53	2.35
Minimum	†	†	†	†	†	1.25	1.56
25th percentile	†	†	†	†	†	1.46	2.13
Median	†	†	†	†	†	1.51	2.29
75th percentile	†	†	†	†	†	1.62	2.62
Maximum	†	†	†	†	†	1.83	3.35

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis. NPSAS = National Postsecondary Student Aid Study. AP = advanced placement. STEM = science, technology, engineering, and mathematics. PE = physical education. GPA = grade point average.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-19. Design effects for selected variables using the B&B:08/09 combined weight (WTC000) for Hispanic students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Total number of undergraduate courses	QEUGCRS (mean)	43.97	0.59	0.38	1,300	1.56	2.42
NPSAS Bachelor's degree field of study: business	QF11FBAC = 9	23.54	1.87	1.19	1,270	1.57	2.47
NPSAS Bachelor's degree was with honors	QFHDGHON = 1	21.46	1.91	1.14	1,300	1.68	2.83
Elapsed time from entry to NPSAS bachelor's degree	QDFA2BCH (mean)	51.38	1.45	0.97	1,300	1.50	2.25
Number of repeated courses	QETCSRPT (mean)	0.98	0.10	0.06	1,300	1.54	2.36
Remedial courses: number taken	QETOTR (mean)	0.82	0.07	0.04	1,300	1.76	3.09
Total noncourse credits	QBTLNCCR (mean)	1.86	0.18	0.14	1,280	1.33	1.77
Total AP credits awarded by institution	QBTLAPCR (mean)	0.94	0.13	0.10	1,290	1.31	1.73
Military training/experience course credit	QBNMMLCR (mean)	0.05	0.04	0.03	1,300	1.61	2.60
Transfer credits accepted by NPSAS institution	QETRACC (mean)	17.17	1.32	0.76	1,190	1.73	2.99
First year enrollment: credits earned	QE1STERN (mean)	26.39	0.41	0.28	1,280	1.47	2.16
Per-year average: credits earned	QEAVERGN (mean)	25.66	0.28	0.20	1,280	1.39	1.93
Fine arts, includes graphic arts and design: credits earned	QEFARERN (mean)	6.64	0.55	0.40	1,300	1.37	1.87
Nursing: credits earned	QENRSERN (mean)	1.51	0.37	0.24	1,300	1.53	2.33
Study abroad: credits earned	QESABERN (mean)	0.28	0.06	0.05	1,300	1.21	1.47
STEM: credits earned	QESTMERN (mean)	22.56	1.06	0.74	1,300	1.43	2.04
Non-STEM: credits earned	QENSTERN (mean)	95.53	1.39	0.87	1,300	1.60	2.56
First-second years: credits earned	QE12ERN (mean)	52.28	0.76	0.51	1,280	1.48	2.20
Computer science: credits attempted	QECSCATT (mean)	2.84	0.28	0.18	1,300	1.49	2.23
Student teaching: credits attempted	QESTTATT (mean)	0.37	0.06	0.05	1,300	1.16	1.35
Non-science & engineering: number taken	QENSENUM (mean)	38.55	0.56	0.35	1,300	1.60	2.56
Science & engineering: number taken	QESERNUM (mean)	4.76	0.26	0.21	1,300	1.26	1.58
Sports/PE/recreation: GPA	QESPTGPA (mean)	3.58	0.05	0.03	420	1.63	2.64
Social sciences: GPA	QESSCGPA (mean)	3.09	0.03	0.02	1,200	1.59	2.53
GPA in fourth year of attendance	QEYR4GPA (mean)	3.19	0.03	0.02	860	1.40	1.97
Summary statistics							
Mean	†	†	†	†	†	1.49	2.24
Minimum	†	†	†	†	†	1.16	1.35
25th percentile	†	†	†	†	†	1.39	1.93
Median	†	†	†	†	†	1.50	2.25
75th percentile	†	†	†	†	†	1.60	2.56
Maximum	†	†	†	†	†	1.76	3.09

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis. NPSAS = National Postsecondary Student Aid Study. AP = advanced placement. STEM = science, technology, engineering, and mathematics. PE = physical education. GPA = grade point average.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-20. Design effects for selected variables using the B&B:08/09 combined weight (WTC000) for Asian students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Total number of undergraduate courses	QEUGCRS (mean)	44.12	0.80	0.49	910	1.63	2.64
NPSAS Bachelor's degree field of study: business	QF11FBAC = 9	22.56	2.67	1.41	880	1.90	3.61
NPSAS Bachelor's degree was with honors	QFHDGHON = 1	26.22	2.38	1.46	910	1.63	2.66
Elapsed time from entry to NPSAS bachelor's degree	QDFA2BCH (mean)	46.41	1.83	0.93	890	1.97	3.87
Number of repeated courses	QETCSRPT (mean)	0.83	0.10	0.07	910	1.44	2.06
Remedial courses: number taken	QETOTR (mean)	0.55	0.11	0.06	910	1.70	2.88
Total noncourse credits	QBTLNCCR (mean)	3.47	0.51	0.28	880	1.83	3.35
Total AP credits awarded by institution	QBTLAPCR (mean)	2.44	0.34	0.21	890	1.61	2.60
Military training/experience course credit	QBNMMLCR (mean)	0.00	0.00	0.00	910	0.06	0.00
Transfer credits accepted by NPSAS institution	QETRACC (mean)	14.94	1.74	1.01	820	1.73	3.00
First year enrollment: credits earned	QE1STERN (mean)	29.24	0.54	0.34	900	1.58	2.51
Per-year average: credits earned	QEAVERGN (mean)	27.62	0.39	0.24	900	1.64	2.68
Fine arts, includes graphic arts and design: credits earned	QEFARERN (mean)	6.50	0.84	0.51	900	1.66	2.75
Nursing: credits earned	QENRSERN (mean)	2.29	0.54	0.36	910	1.50	2.26
Study abroad: credits earned	QESABERN (mean)	0.75	0.25	0.16	900	1.61	2.60
STEM: credits earned	QESTMERN (mean)	38.92	2.08	1.22	900	1.71	2.93
Non-STEM: credits earned	QENSTERN (mean)	83.44	2.39	1.34	900	1.79	3.20
First-second years: credits earned	QE12ERN (mean)	57.29	0.89	0.55	900	1.62	2.61
Computer science: credits attempted	QECSCATT (mean)	4.27	0.46	0.32	900	1.46	2.14
Student teaching: credits attempted	QESTTATT (mean)	0.16	0.05	0.04	910	1.40	1.95
Non-science & engineering: number taken	QENSENUM (mean)	34.24	0.84	0.45	910	1.86	3.46
Science & engineering: number taken	QESERNUM (mean)	9.20	0.60	0.36	910	1.65	2.72
Sports/PE/recreation: GPA	QESPTGPA (mean)	3.58	0.09	0.05	210	1.81	3.27
Social sciences: GPA	QESSCGPA (mean)	3.18	0.04	0.02	820	1.65	2.71
GPA in fourth year of attendance	QEYR4GPA (mean)	3.27	0.04	0.02	660	1.68	2.81
Summary statistics							
Mean	†	†	†	†	†	1.60	2.69
Minimum	†	†	†	†	†	0.06	0.00
25th percentile	†	†	†	†	†	1.61	2.60
Median	†	†	†	†	†	1.65	2.71
75th percentile	†	†	†	†	†	1.73	3.00
Maximum	†	†	†	†	†	1.97	3.87

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis. NPSAS = National Postsecondary Student Aid Study. AP = advanced placement. STEM = science, technology, engineering, and mathematics. PE = physical education. GPA = grade point average.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-21. Design effects for selected variables using the B&B:08/09 combined weight (WTC000) for other race students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Total number of undergraduate courses	QEUGCRS (mean)	43.55	1.06	0.66	470	1.61	2.59
NPSAS Bachelor's degree field of study: business	QF11FBAC = 9	23.00	3.54	1.98	450	1.79	3.20
NPSAS Bachelor's degree was with honors	QFHDGHON = 1	22.92	3.02	1.94	470	1.56	2.43
Elapsed time from entry to NPSAS bachelor's degree	QDFA2BCH (mean)	47.38	2.57	1.63	460	1.58	2.48
Number of repeated courses	QETCSRPT (mean)	0.48	0.11	0.09	470	1.14	1.31
Remedial courses: number taken	QETOTR (mean)	0.48	0.07	0.05	470	1.31	1.73
Total noncourse credits	QBTLNCCR (mean)	1.66	0.34	0.29	460	1.18	1.40
Total AP credits awarded by institution	QBTLAPCR (mean)	0.83	0.18	0.14	460	1.28	1.65
Military training/experience course credit	QBNMMLCR (mean)	0.22	0.14	0.14	460	0.94	0.88
Transfer credits accepted by NPSAS institution	QETRNAACC (mean)	17.58	2.15	1.35	430	1.59	2.51
First year enrollment: credits earned	QE1STERN (mean)	27.54	0.69	0.44	460	1.56	2.43
Per-year average: credits earned	QEAVERGN (mean)	27.17	0.55	0.32	460	1.70	2.88
Fine arts, includes graphic arts and design: credits earned	QEFARERN (mean)	9.34	1.36	0.82	460	1.65	2.73
Nursing: credits earned	QENRSERN (mean)	1.78	0.69	0.44	470	1.56	2.43
Study abroad: credits earned	QESABERN (mean)	0.57	0.21	0.16	460	1.31	1.71
STEM: credits earned	QESTMERN (mean)	22.75	1.51	1.10	460	1.37	1.87
Non-STEM: credits earned	QENSTERN (mean)	96.50	2.18	1.46	460	1.50	2.24
First-second years: credits earned	QE12ERN (mean)	54.32	1.39	0.80	460	1.73	2.98
Computer science: credits attempted	QECSCATT (mean)	2.85	0.42	0.33	470	1.29	1.67
Student teaching: credits attempted	QESTTATT (mean)	0.53	0.16	0.12	470	1.36	1.86
Non-science & engineering: number taken	QENSENUM (mean)	37.82	1.01	0.61	470	1.64	2.71
Science & engineering: number taken	QESERNUM (mean)	4.91	0.41	0.32	470	1.29	1.66
Sports/PE/recreation: GPA	QESPTGPA (mean)	3.51	0.08	0.05	160	1.51	2.29
Social sciences: GPA	QESSCGPA (mean)	3.21	0.04	0.03	420	1.43	2.04
GPA in fourth year of attendance	QEYR4GPA (mean)	3.26	0.07	0.04	300	1.72	2.95
Summary statistics							
Mean	†	†	†	†	†	1.46	2.19
Minimum	†	†	†	†	†	0.94	0.88
25th percentile	†	†	†	†	†	1.31	1.71
Median	†	†	†	†	†	1.51	2.29
75th percentile	†	†	†	†	†	1.61	2.59
Maximum	†	†	†	†	†	1.79	3.20

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).

² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis. NPSAS = National Postsecondary Student Aid Study. AP = advanced placement. STEM = science, technology, engineering, and mathematics. PE = physical education. GPA = grade point average.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-22. Design effects for selected variables using the B&B:08/09 combined weight (WTC000) for male students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Total number of undergraduate courses	QEUGCRS (mean)	45.46	0.30	0.19	5,740	1.65	2.71
NPSAS Bachelor's degree field of study: business	QF11FBAC = 9	28.43	0.82	0.60	5,610	1.36	1.85
NPSAS Bachelor's degree was with honors	QFHDGHON = 1	22.95	0.91	0.55	5,780	1.65	2.71
Elapsed time from entry to NPSAS bachelor's degree	QDFA2BCH (mean)	50.07	0.68	0.41	5,700	1.64	2.69
Number of repeated courses	QETCSRPT (mean)	0.70	0.04	0.03	5,740	1.44	2.07
Remedial courses: number taken	QETOTR (mean)	0.44	0.02	0.01	5,740	1.73	3.00
Total noncourse credits	QBTLNCCR (mean)	2.47	0.15	0.10	5,610	1.54	2.38
Total AP credits awarded by institution	QBTLAPCR (mean)	1.29	0.09	0.06	5,680	1.42	2.02
Military training/experience course credit	QBNMMLCR (mean)	0.22	0.08	0.04	5,720	2.10	4.39
Transfer credits accepted by NPSAS institution	QETRACC (mean)	15.28	0.60	0.39	5,200	1.55	2.39
First year enrollment: credits earned	QE1STERN (mean)	27.79	0.19	0.13	5,650	1.47	2.15
Per-year average: credits earned	QEAVERGN (mean)	26.69	0.15	0.10	5,660	1.47	2.17
Fine arts, includes graphic arts and design: credits earned	QEFARERN (mean)	6.96	0.32	0.20	5,720	1.61	2.58
Nursing: credits earned	QENRSERN (mean)	0.55	0.07	0.07	5,740	1.05	1.11
Study abroad: credits earned	QESABERN (mean)	0.55	0.06	0.04	5,730	1.60	2.57
STEM: credits earned	QESTMERN (mean)	32.34	0.52	0.45	5,720	1.14	1.31
Non-STEM: credits earned	QENSTERN (mean)	90.71	0.65	0.47	5,720	1.37	1.88
First-second years: credits earned	QE12ERN (mean)	54.54	0.34	0.23	5,650	1.45	2.12
Computer science: credits attempted	QECSCATT (mean)	4.75	0.18	0.14	5,720	1.29	1.65
Student teaching: credits attempted	QESTTATT (mean)	0.30	0.03	0.02	5,730	1.22	1.50
Non-science & engineering: number taken	QENSENUM (mean)	38.41	0.29	0.18	5,740	1.56	2.44
Science & engineering: number taken	QESERNUM (mean)	6.46	0.14	0.12	5,740	1.19	1.41
Sports/PE/recreation: GPA	QESPTGPA (mean)	3.61	0.02	0.01	2,010	1.55	2.42
Social sciences: GPA	QESSCGPA (mean)	3.11	0.01	0.01	5,200	1.71	2.91
GPA in fourth year of attendance	QEYR4GPA (mean)	3.18	0.02	0.01	4,020	1.68	2.81
Summary statistics							
Mean	†	†	†	†	†	1.50	2.29
Minimum	†	†	†	†	†	1.05	1.11
25th percentile	†	†	†	†	†	1.37	1.88
Median	†	†	†	†	†	1.54	2.38
75th percentile	†	†	†	†	†	1.64	2.69
Maximum	†	†	†	†	†	2.10	4.39

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis. NPSAS = National Postsecondary Student Aid Study. AP = advanced placement. STEM = science, technology, engineering, and mathematics. PE = physical education. GPA = grade point average.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table L-23. Design effects for selected variables using the B&B:08/09 combined weight (WTC000) for female students: 2009

Variable description	Definition	Estimate	Design standard error	Simple random sample standard error	Sample size	DEFT ¹	DEFF ²
Total number of undergraduate courses	QEUGCRS (mean)	44.22	0.28	0.16	8,180	1.83	3.33
NPSAS Bachelor's degree field of study: business	QF11FBAC = 9	19.02	0.56	0.44	8,050	1.28	1.65
NPSAS Bachelor's degree was with honors	QFHDGHON = 1	31.63	0.74	0.51	8,240	1.45	2.10
Elapsed time from entry to NPSAS bachelor's degree	QDFA2BCH (mean)	48.34	0.60	0.36	8,130	1.66	2.74
Number of repeated courses	QETCSRPT (mean)	0.53	0.02	0.02	8,180	1.16	1.34
Remedial courses: number taken	QETOTR (mean)	0.53	0.02	0.01	8,180	1.76	3.09
Total noncourse credits	QBTLNCCR (mean)	1.90	0.10	0.07	8,090	1.54	2.38
Total AP credits awarded by institution	QBTLAPCR (mean)	0.97	0.05	0.04	8,140	1.39	1.92
Military training/experience course credit	QBNMMLCR (mean)	0.05	0.02	0.01	8,180	1.70	2.90
Transfer credits accepted by NPSAS institution	QETRNACC (mean)	17.84	0.62	0.33	7,510	1.85	3.43
First year enrollment: credits earned	QE1STERN (mean)	27.80	0.17	0.11	8,060	1.60	2.55
Per-year average: credits earned	QEAVERGN (mean)	26.97	0.13	0.08	8,060	1.61	2.58
Fine arts, includes graphic arts and design: credits earned	QEFARERN (mean)	8.36	0.28	0.19	8,160	1.50	2.24
Nursing: credits earned	QENRSERN (mean)	3.54	0.16	0.15	8,180	1.12	1.25
Study abroad: credits earned	QESABERN (mean)	0.82	0.06	0.04	8,160	1.56	2.43
STEM: credits earned	QESTMERN (mean)	21.75	0.34	0.24	8,150	1.37	1.88
Non-STEM: credits earned	QENSTERN (mean)	99.69	0.56	0.34	8,160	1.66	2.75
First-second years: credits earned	QE12ERN (mean)	55.00	0.32	0.19	8,060	1.72	2.96
Computer science: credits attempted	QECSCATT (mean)	2.04	0.07	0.05	8,160	1.44	2.08
Student teaching: credits attempted	QESTTATT (mean)	1.09	0.05	0.04	8,160	1.16	1.35
Non-science & engineering: number taken	QENSENUM (mean)	38.79	0.25	0.15	8,180	1.65	2.72
Science & engineering: number taken	QESERNUM (mean)	4.87	0.11	0.08	8,180	1.35	1.83
Sports/PE/recreation: GPA	QESPTGPA (mean)	3.63	0.02	0.01	2,950	1.72	2.96
Social sciences: GPA	QESSCGPA (mean)	3.22	0.01	0.01	7,490	1.39	1.93
GPA in fourth year of attendance	QEYR4GPA (mean)	3.35	0.01	0.01	5,540	1.65	2.71
Summary statistics							
Mean	†	†	†	†	†	1.52	2.36
Minimum	†	†	†	†	†	1.12	1.25
25th percentile	†	†	†	†	†	1.39	1.92
Median	†	†	†	†	†	1.56	2.43
75th percentile	†	†	†	†	†	1.66	2.75
Maximum	†	†	†	†	†	1.85	3.43

† Not applicable.

¹ DEFT is the square root of DEFF and can also be defined as the ratio of the design-based standard error over the standard error that would have been obtained from a simple random sample of the same size (if that were practical).

² DEFF is the survey design effect for a statistic and is defined as the ratio of the design-based variance estimate over the variance estimate that would have been obtained from a simple random sample of the same size (if that were practical).

NOTE: Responses that include logical skips, not applicable, missing, unknown, or multiple possible answers were excluded from analysis. NPSAS = National Postsecondary Student Aid Study. AP = advanced placement. STEM = science, technology, engineering, and mathematics. PE = physical education. GPA = grade point average.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Appendix M

Nonresponse Bias Analysis

Table M-1. Student nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students overall: 2009

Variable	Before nonresponse adjustment								After nonresponse adjustment			
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Estimated bias	Relative bias
	Respondents	Non-respondents	Respondents	Non-respondents	Estimated bias	Relative bias	Estimated bias	Relative bias	Before adjustments	After adjustments		
Institution type												
Public	8,680	1,230	63.54	60.53	0.65	1.04	0.65	1.04	62.89	62.86	-0.03	-0.05
Private nonprofit	5,610	750	32.50	33.24	-0.16	-0.49	-0.16	-0.49	32.66	32.53	-0.14	-0.41
Private for-Profit	760	130	3.96	6.22	-0.49	-11.06	-0.49	-11.06	4.45	4.62	0.17	3.76
Institution region¹												
New England	760	130	6.75	7.74	-0.22	-3.09	-0.22	-3.09	6.96	5.87	-1.10*	-15.75
Mideast	2,590	460	16.69	20.38	-0.80	-4.58	-0.80	-4.58	17.49	17.26	-0.23	-1.31
Great Lakes	2,380	300	16.41	13.60	0.61	3.86	0.61	3.86	15.80	16.81	1.01	6.37
Plains	1,920	230	8.26	9.01	-0.16	-1.93	-0.16	-1.93	8.42	8.66	0.23	2.76
Southeast	3,450	490	24.68	24.27	0.09	0.36	0.09	0.36	24.59	24.84	0.25	1.00
Southwest	1,220	180	9.25	9.94	-0.15	-1.58	-0.15	-1.58	9.40	9.02	-0.38	-4.02
Rocky Mountains	720	60	4.12	3.14	0.21	5.47	0.21	5.47	3.91	4.43	0.52	13.34
Far West	1,800	240	12.36	10.83	0.33	2.77	0.33	2.77	12.02	11.77	-0.26	-2.13
Outlying areas	210	20	1.48	1.11	0.08	5.83	0.08	5.83	1.40	1.35	-0.05	-3.31
Institution total enrollment²												
4,743 or less	3,790	500	20.82	21.32	-0.11	-0.52	-0.11	-0.52	20.93	21.26	0.33	1.60
4,744–13,042	3,740	560	21.45	20.18	0.28	1.31	0.28	1.31	21.17	22.21	1.04	4.90
13,043–27,210	3,790	530	26.45	28.77	-0.50	-1.87	-0.50	-1.87	26.96	26.35	-0.61	-2.27
27,211 or more	3,730	520	31.28	29.73	0.34	1.09	0.34	1.09	30.94	30.18	-0.76	-2.46
Pell Grant status												
Received	6,020	720	25.81	22.64	0.69	2.74	0.69	2.74	25.12	22.27	-2.85*	-11.34
Did not receive	9,030	1,400	74.19	77.36	-0.69	-0.92	-0.69	-0.92	74.88	77.73	2.85*	3.81
Total Pell Grant amount received²												
\$1,580 or less	1,520	170	27.16	27.37	-0.05	-0.17	-0.04	-0.15	27.20	30.96	3.76*	13.83
\$1,581–\$2,695	1,480	200	25.07	29.33	-0.93	-3.56	-0.83	-3.22	25.90	25.54	-0.36	-1.41
\$2,696–\$4,310	1,490	160	22.24	17.34	1.06	5.02	0.96	4.51	21.28	20.78	-0.50	-2.34
\$4,311 or more	1,530	190	25.53	25.96	-0.09	-0.36	-0.08	-0.32	25.62	22.72	-2.90*	-11.32
Stafford Loan status												
Received	8,390	1,090	50.32	43.34	1.51*	3.10	1.51*	3.10	48.80	44.81	-4.00*	-8.19
Did not receive	6,660	1,030	49.68	56.66	-1.51*	-2.96	-1.51*	-2.96	51.20	55.19	4.00*	7.81

See notes at end of table.

Table M-1. Student nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students overall: 2009—Continued

Variable	Before nonresponse adjustment								After nonresponse adjustment			
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Estimated bias	Relative bias
	Respondents	Non-respondents	Respondents	Non-respondents	Estimated bias	Relative bias	Estimated bias	Relative bias	Before adjustments	After adjustments		
Total Stafford Loan amount received ²												
\$4,410 or less	2,100	270	23.09	26.57	-0.76	-3.17	-0.67	-2.82	23.76	23.98	0.22	0.92
\$4,411–\$5,500	4,080	450	48.86	39.25	2.09*	4.46	1.85*	3.94	47.01	48.91	1.91*	4.06
\$5,501–\$6,500	190	30	2.01	3.49	-0.32	-13.72	-0.28	-12.38	2.30	2.38	0.08	3.64
\$6,501 or more	2,030	340	26.04	30.70	-1.01	-3.74	-0.90	-3.34	26.94	24.72	-2.21*	-8.21
Total PLUS amount received ²												
\$5,000 or less	230	30	22.21	21.70	0.11	0.50	0.11	0.51	22.10	21.18	-0.92	-4.17
\$5,001–\$9,396	230	30	23.54	26.70	-0.69	-2.84	-0.69	-2.86	24.23	24.55	0.32	1.33
\$9,397–\$14,000	240	30	25.97	32.52	-1.42	-5.19	-1.43	-5.23	27.41	26.64	-0.77	-2.81
\$14,001 or more	230	30	28.28	19.08	2.00	7.60	2.01	7.67	26.26	27.63	1.37	5.22
Federal aid status												
Received	10,380	1,280	58.99	49.51	2.06*	3.62	2.06*	3.62	56.93	53.48	-3.45*	-6.06
Did not receive	4,670	840	41.01	50.49	-2.06*	-4.78	-2.06*	-4.78	43.07	46.52	3.45*	8.01
Institution aid status												
Received	7,840	860	42.45	29.02	2.92*	7.38	2.92*	7.38	39.54	41.57	2.03*	5.13
Did not receive	7,210	1,260	57.55	70.98	-2.92*	-4.82	-2.92*	-4.82	60.46	58.43	-2.03*	-3.36
State aid status												
Received	6,160	650	29.52	19.16	2.25*	8.25	2.25*	8.25	27.27	28.40	1.14*	4.17
Did not receive	8,890	1,470	70.48	80.84	-2.25*	-3.09	-2.25*	-3.09	72.73	71.60	-1.14*	-1.56
Any aid status												
Received	12,910	1,620	77.93	63.17	3.21*	4.29	3.21*	4.29	74.73	76.27	1.55*	2.07
Did not receive	2,140	490	22.07	36.83	-3.21*	-12.68	-3.21*	-12.68	25.27	23.73	-1.55*	-6.12

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington; Outlying Areas = American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, Palau, U.S. Virgin Islands.

² Undergraduate enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table M-2. Student nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students in public institutions: 2009

Variable	Before nonresponse adjustment						After nonresponse adjustment					
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Estimated bias	Relative bias
	Respondents	Non-respondents	Respondents	Non-respondents	Estimated bias	Relative bias	Estimated bias	Relative bias	Before adjustments	After adjustments		
Institution region¹												
New England	200	40	3.52	4.18	-0.14	-3.95	-0.14	-3.80	3.66	2.68	-0.98	-26.80
Mideast	1,300	240	13.23	15.94	-0.59	-4.25	-0.57	-4.10	13.80	14.19	0.39	2.86
Great Lakes	1,340	170	17.57	13.22	0.95	5.69	0.91	5.46	16.66	18.14	1.48*	8.87
Plains	1,120	120	7.93	6.68	0.27	3.54	0.26	3.40	7.67	8.43	0.76*	9.93
Southeast	2,110	310	27.31	30.17	-0.62	-2.22	-0.60	-2.14	27.91	27.37	-0.54	-1.93
Southwest	810	130	10.55	11.16	-0.13	-1.24	-0.13	-1.19	10.68	10.38	-0.30	-2.80
Rocky Mountains	430	40	4.61	3.31	0.28	6.56	0.27	6.30	4.34	4.62	0.28	6.46
Far West	1,290	180	14.4	14.60	-0.04	-0.29	-0.04	-0.28	14.44	13.46	-0.98	-6.82
Outlying areas	90	10	0.86	0.74	0.03	3.14	0.03	3.02	0.84	0.72	-0.11	-13.54
Institution total enrollment²												
11,664 or less	2,190	330	20.25	17.46	0.61	3.09	0.58	2.97	19.67	20.51	0.84	4.28
11,665–20,095	2,160	290	23.17	27.77	-1.00	-4.13	-0.96	-3.98	24.13	23.82	-0.31	-1.30
20,096–31,916	2,180	300	26.30	22.80	0.76	2.97	0.73	2.85	25.57	25.77	0.21	0.81
31,917 or more	2,150	320	30.28	31.97	-0.37	-1.20	-0.35	-1.15	30.63	29.90	-0.73	-2.39
Pell Grant status												
Received	3,570	430	27.11	23.26	0.84	3.19	0.81	3.06	26.31	22.48	-3.83*	-14.54
Did not receive	5,110	810	72.89	76.74	-0.84	-1.14	-0.81	-1.09	73.69	77.52	3.83*	5.19
Total Pell Grant amount received²												
\$1,560 or less	920	100	26.96	28.80	-0.40	-1.46	-0.34	-1.25	27.30	30.81	3.51*	12.85
\$1,561–\$2,660	900	120	25.74	26.10	-0.08	-0.30	-0.07	-0.26	25.80	26.77	0.97	3.76
\$2,661–\$4,310	860	100	22.11	18.55	0.77	3.63	0.66	3.07	21.45	20.02	-1.43	-6.68
\$4,311 or more	900	110	25.19	26.55	-0.29	-1.16	-0.25	-0.99	25.44	22.40	-3.04*	-11.97
Stafford Loan status												
Received	4,450	570	45.09	37.18	1.72*	3.96	1.65*	3.81	43.44	39.86	-3.57*	-8.23
Did not receive	4,230	660	54.91	62.82	-1.72*	-3.04	-1.65*	-2.93	56.56	60.14	3.57*	6.32
Total Stafford Loan amount received²												
\$3,767 or less	1,110	150	22.54	28.60	-1.32	-5.52	-1.09	-4.59	23.62	22.92	-0.71	-2.99
\$3,768–\$5,500	2,210	240	50.42	39.32	2.41*	5.02	1.99*	4.10	48.43	50.98	2.55*	5.26
\$5,501–\$5,949	50	10	0.78	0.30	0.10*	15.37	0.09*	12.33	0.69	0.91	0.22*	31.05
\$5,950 or more	1,080	170	26.26	31.78	-1.20	-4.36	-0.99	-3.62	27.25	25.19	-2.06*	-7.56

See notes at end of table.

Table M-2. Student nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students in public institutions: 2009—Continued

Variable	Before nonresponse adjustment						After nonresponse adjustment					
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Estimated bias	Relative bias
	Respondents	Non-respondents	Respondents	Non-respondents	Estimated bias	Relative bias	Estimated bias	Relative bias	Before adjustments	After adjustments		
Total PLUS amount received ²												
\$4,488 or less	100	10	24.68	21.99	0.58	2.42	0.52	2.16	24.16	23.00	-1.16	-4.78
\$4,489–\$7,453	100	20	26.23	31.82	-1.21	-4.42	-1.09	-3.98	27.32	25.82	-1.50	-5.50
\$7,454–\$12,000	110	20	24.70	34.03	-2.03	-7.59	-1.82	-6.85	26.51	26.82	0.31	1.17
\$12,001 or more	100	10	24.39	12.16	2.66	12.22	2.38	10.81	22.01	24.36	2.35	10.66
Federal aid status												
Received	5,720	700	54.40	43.76	2.31*	4.44	2.22*	4.26	52.18	48.78	-3.40*	-6.52
Did not receive	2,950	530	45.60	56.24	-2.31*	-4.82	-2.22*	-4.65	47.82	51.22	3.40*	7.11
Institution aid status												
Received	3,600	360	33.67	21.36	2.67*	8.62	2.57*	8.27	31.1	32.61	1.51*	4.86
Did not receive	5,080	870	66.33	78.64	-2.67*	-3.87	-2.57*	-3.73	68.9	67.39	-1.51*	-2.20
State aid status												
Received	3,570	370	29.83	17.79	2.61*	9.61	2.52*	9.21	27.31	28.3	0.99	3.63
Did not receive	5,110	870	70.17	82.21	-2.61*	-3.59	-2.52*	-3.46	72.69	71.7	-0.99	-1.36
Any aid status												
Received	7,100	890	73.69	57.73	3.47*	4.94	3.34*	4.74	70.35	71.49	1.13	1.61
Did not receive	1,570	340	26.31	42.27	-3.47*	-11.64	-3.34*	-11.26	29.65	28.51	-1.13	-3.82

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota;

Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington; Outlying Areas = American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, Palau, U.S. Virgin Islands.

² Undergraduate enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table M-3. Student nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students in private nonprofit institutions: 2009

Variable	Before nonresponse adjustment								After nonresponse adjustment			
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Estimated bias	Relative bias
	Respondents	Non-respondents	Respondents	Non-respondents	Estimated bias	Relative bias	Estimated bias	Relative bias	Before adjustments	After adjustments		
Institution region¹												
New England	560	90	13.88	15.66	-0.39	-2.71	-0.39	-2.75	14.27	12.86	-1.42	-9.92
Mideast	1,150	190	24.46	30.56	-1.32	-5.14	-1.35	-5.22	25.81	23.57	-2.24	-8.67
Great Lakes	930	100	14.74	13.69	0.23	1.57	0.23	1.60	14.51	15.41	0.90	6.22
Plains	690	100	9.16	14.07	-1.07*	-10.44	-1.09*	-10.6	10.24	9.23	-1.01	-9.91
Southeast	1,210	160	20.76	13.74	1.52*	7.93	1.55*	8.08	19.20	20.90	1.70	8.83
Southwest	300	30	3.96	3.60	0.08	2.01	0.08	2.04	3.88	4.84	0.96*	24.69
Rocky Mountains	260	20	2.94	2.15	0.17	6.19	0.17	6.31	2.76	3.52	0.76	27.55
Far West	410	50	7.81	4.56	0.70	9.91	0.72	10.11	7.09	7.09	0.00	0.02
Outlying areas	120	20	2.31	1.98	0.07	3.24	0.07	3.30	2.24	2.58	0.35	15.57
Institution total enrollment²												
2,511 or less	1,400	190	28.65	28.29	0.08	0.27	0.08	0.27	28.57	25.68	-2.89*	-10.11
2,512–4,877	1,440	160	22.13	19.07	0.66	3.09	0.67	3.15	21.45	23.44	1.99*	9.30
4,878–11,571	1,380	210	22.97	20.35	0.57	2.54	0.58	2.59	22.39	22.96	0.57	2.53
11,572 or more	1,400	190	26.26	32.29	-1.31	-4.75	-1.33	-4.83	27.59	27.92	0.33	1.19
Pell Grant status												
Received	2,080	240	23.47	23.38	0.02	0.08	0.02	0.08	23.45	21.42	-2.03*	-8.66
Did not receive	3,540	520	76.53	76.62	-0.02	-0.02	-0.02	-0.03	76.55	78.58	2.03*	2.65
Total Pell Grant amount received²												
\$1,660 or less	540	60	27.55	33.55	-1.30	-4.52	-1.32	-4.58	28.87	31.04	2.17	7.52
\$1,661–\$2,860	500	60	23.99	28.93	-1.07	-4.29	-1.09	-4.35	25.08	23.19	-1.89	-7.55
\$2,861–\$4,310	490	50	20.99	11.5	2.06*	10.89	2.09*	11.07	18.90	20.69	1.79	9.48
\$4,311 or more	530	70	27.47	26.02	0.32	1.16	0.32	1.18	27.15	25.08	-2.07	-7.62
Stafford Loan status												
Received	3,410	430	59.02	49.75	2.01*	3.53	2.05*	3.60	56.97	51.30	-5.67*	-9.95
Did not receive	2,200	320	40.98	50.25	-2.01*	-4.68	-2.05*	-4.76	43.03	48.70	5.67*	13.18
Total Stafford Loan amount received²												
\$5,500 or less	2,580	300	74.05	65.01	1.96	2.72	1.75	2.41	72.3	74.49	2.19	3.03
\$5,501–\$5,542	10	#	0.36	0.06	0.06	22.08	0.06	19.15	0.30	0.23	-0.07	-22.95
\$5,543 or more	830	130	25.59	34.93	-2.03	-7.34	-1.80	-6.58	27.40	25.28	-2.12	-7.74

See notes at end of table.

Table M-3. Student nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students in private nonprofit institutions: 2009—Continued

Variable	Before nonresponse adjustment						After nonresponse adjustment					
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Esti- mated bias	Rela- tive bias
	Respon- dents	Non- respon- dents	Respon- dents	Non- respon- dents	Esti- mated bias	Rela- tive bias	Esti- mated bias	Rela- tive bias	Before adjust- ments	After adjust- ments		
Total PLUS amount received ²												
\$6,225 or less	120	20	17.43	5.81	2.53*	16.94	2.60*	17.51	14.84	16.41	1.57	10.60
\$6,226–\$11,000	130	10	25.23	27.30	-0.45	-1.75	-0.46	-1.80	25.70	25.66	-0.04	-0.15
\$11,001–\$16,096	110	20	25.09	44.36	-4.19	-14.3	-4.31	-14.65	29.39	25.59	-3.80	-12.92
\$16,097 or more	120	20	32.25	22.54	2.11	7.00	2.17	7.21	30.08	32.34	2.27	7.53
Federal aid status												
Received	4,050	480	66.59	56.20	2.26*	3.51	2.30*	3.57	64.30	60.21	-4.09*	-6.35
Did not receive	1,560	280	33.41	43.80	-2.26*	-6.33	-2.30*	-6.44	35.70	39.79	4.09*	11.44
Institution aid status												
Received	4,040	460	63.45	46.53	3.68*	6.15	3.74*	6.27	59.71	62.42	2.72*	4.55
Did not receive	1,580	290	36.55	53.47	-3.68*	-9.14	-3.74*	-9.28	40.29	37.58	-2.72*	-6.74
State aid status												
Received	2,380	250	30.74	23.53	1.57*	5.37	1.59	5.47	29.15	30.65	1.50	5.15
Did not receive	3,240	500	69.26	76.47	-1.57*	-2.21	-1.59	-2.25	70.85	69.35	-1.50	-2.12
Any aid status												
Received	5,120	630	85.37	70.40	3.25*	3.96	3.31*	4.03	82.06	84.58	2.52*	3.07
Did not receive	490	130	14.63	29.60	-3.25*	-18.18	-3.31*	-18.44	17.94	15.42	-2.52*	-14.03

Rounds to zero.

* p < .05

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota;

Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington;

Outlying Areas = American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, Palau, U.S. Virgin Islands.

² Undergraduate enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table M-4. Student nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students in private for-profit institutions: 2009

Variable	Before nonresponse adjustment								After nonresponse adjustment			
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Estimated bias	Relative bias
	Respondents	Non-respondents	Respondents	Non-respondents	Estimated bias	Relative bias	Estimated bias	Relative bias	Before adjustments	After adjustments		
Institution region¹												
New England	†	†	†	†	†	†	†	†	†	†	†	†
Mideast	150	30	8.43	9.19	-0.16	-1.90	-0.23	-2.64	8.66	14.62	5.96*	68.75
Great Lakes	110	30	11.46	16.86	-1.17	-9.28	-1.64	-12.51	13.10	8.48	-4.62	-35.30
Plains	100	10	6.23	4.61	0.35	5.98	0.49	8.57	5.74	7.70	1.96	34.14
Southeast	140	20	14.57	23.10	-1.85	-11.27	-2.59	-15.08	17.16	18.00	0.84	4.89
Southwest	120	20	31.87	31.90	-0.01	-0.02	-0.01	-0.03	31.88	20.05	-11.83	-37.12
Rocky Mountains	40	10	5.94	6.77	-0.18	-2.93	-0.25	-4.05	6.19	8.19	2.00	32.27
Far West	100	20	16.87	7.59	2.02	13.57	2.82	20.07	14.05	21.70	7.65*	54.46
Outlying areas	10	#	4.62	#	1.00	27.74	1.40	43.62	3.22	1.26	-1.96	-60.88
Institution total enrollment²												
1,972 or less	210	30	20.04	9.44	2.30	12.97	3.22	19.13	16.82	23.20	6.37	37.88
1,973–3,355	180	30	12.87	28.29	-3.35	-20.64	-4.68	-26.68	17.55	17.62	0.06	0.36
3,356–8,142	190	30	11.63	18.16	-1.42	-10.86	-1.98	-14.56	13.61	19.71	6.09*	44.76
8,143 or more	190	30	55.46	44.11	2.46	4.65	3.45	6.63	52.01	39.48	-12.53*	-24.09
Pell Grant status												
Received	380	50	24.16	12.63	2.50	11.56	3.50	16.95	20.66	25.46	4.80	23.25
Did not receive	390	80	75.84	87.37	-2.50	-3.20	-3.50	-4.41	79.34	74.54	-4.80	-6.05
Total Pell Grant amount received²												
\$1,480 or less	90	10	34.48	14.62	4.31	14.30	3.69	11.98	30.79	42.08	11.29*	36.65
\$1,481–\$2,860	90	20	32.24	41.25	-1.96	-5.73	-1.67	-4.94	33.91	28.14	-5.77	-17.01
\$2,861–\$4,310	90	10	17.06	29.36	-2.67	-13.54	-2.28	-11.81	19.34	17.25	-2.09	-10.80
\$4,311 or more	100	10	16.22	14.77	0.31	1.98	0.27	1.69	15.95	12.53	-3.43	-21.48
Stafford Loan status												
Received	540	90	62.76	69.09	-1.38	-2.14	-1.92	-2.97	64.69	66.34	1.65	2.55
Did not receive	230	40	37.24	30.91	1.38	3.83	1.92	5.45	35.31	33.66	-1.65	-4.67
Total Stafford Loan amount received²												
\$3,938 or less	140	20	20.71	26.61	-1.28	-5.83	-1.92	-8.47	22.62	28.59	5.97	26.38
\$3,939–\$5,535	140	20	23.44	31.31	-1.71	-6.79	-2.55	-9.81	26.00	27.39	1.39	5.36
\$5,536–\$10,500	250	50	35.92	42.08	-1.34	-3.59	-2.00	-5.27	37.92	42.67	4.75	12.53
\$10,501 or more	10	#	19.93	#	4.33	27.74	6.46	48.02	13.46	1.35	-12.11	-89.98

See notes at end of table.

Table M-4. Student nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students in private for-profit institutions: 2009

Variable	Before nonresponse adjustment								After nonresponse adjustment			
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Estimated bias	Relative bias
	Respondents	Non-respondents	Respondents	Non-respondents	Estimated bias	Relative bias	Estimated bias	Relative bias	Before adjustments	After adjustments		
Total PLUS amount received ²												
\$5,000 or less	10	#	23.14	98.81	-16.43*	-41.52	-43.68*	-65.37	66.83	24.10	-42.73*	-63.94
\$5,001–\$8,253	10	#	36.79	#	7.99*	27.74	21.24	136.58	15.55	37.68	22.13	142.30
\$8,254–\$11,737	10	#	4.66	0.18	0.97	26.39	2.58	124.69	2.07	4.87	2.80	134.94
\$11,738 or more	10	#	35.41	1.01	7.47*	26.74	19.86	127.72	15.55	33.35	17.80	114.47
Federal aid status												
Received	600	90	70.32	69.68	0.14	0.20	0.19	0.27	70.12	70.14	0.02	0.02
Did not receive	160	40	29.68	30.32	-0.14	-0.46	-0.19	-0.64	29.88	29.86	-0.02	-0.06
Institution aid status												
Received	200	30	11.09	10.01	0.23	2.16	0.33	3.05	10.76	16.56	5.80*	53.86
Did not receive	560	100	88.91	89.99	-0.23	-0.26	-0.33	-0.37	89.24	83.44	-5.80*	-6.50
State aid status												
Received	210	30	14.51	9.10	1.17	8.80	1.64	12.76	12.87	13.98	1.11	8.61
Did not receive	550	100	85.49	90.90	-1.17	-1.35	-1.64	-1.88	87.13	86.02	-1.11	-1.27
Any aid status												
Received	690	110	84.96	77.52	1.62	1.94	2.26	2.73	82.70	82.96	0.25	0.30
Did not receive	80	20	15.04	22.48	-1.62	-9.71	-2.26	-13.07	17.30	17.04	-0.25	-1.45

† Not applicable.

Rounds to zero.

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Midwest = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota;

Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington;

Outlying Areas = American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, Palau, U.S. Virgin Islands.

² Undergraduate enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table M-5. Both student and transcript nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students overall: 2009

Variable	Before nonresponse adjustment						After nonresponse adjustment					
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Esti- mated bias	Rela- tive bias
	Respon- dents	Non- respon- dents	Respon- dents	Non- respon- dents	Esti- mated bias	Rela- tive bias	Esti- mated bias	Rela- tive bias	Before adjust- ments	After adjust- ments		
Institution type												
Public	8,150	1,690	63.75	59.61	1.11	1.78	1.11	1.78	62.63	62.86	0.23	0.36
Private nonprofit	5,140	1,190	32.02	35.06	-0.82	-2.49	-0.82	-2.49	32.84	32.53	-0.32	-0.96
Private for-Profit	730	160	4.23	5.33	-0.30	-6.52	-0.30	-6.52	4.53	4.62	0.09	1.99
Institution region¹												
New England	730	150	6.95	7.29	-0.09	-1.29	-0.09	-1.29	7.05	6.03	-1.01	-14.39
Mideast	2,390	640	16.54	20.62	-1.10	-6.22	-1.10*	-6.22	17.64	17.49	-0.15	-0.83
Great Lakes	2,200	460	16.98	12.84	1.12	7.03	1.12	7.03	15.86	16.61	0.75	4.70
Plains	1,860	270	8.58	7.86	0.19	2.30	0.19	2.30	8.39	8.73	0.34	4.05
Southeast	3,100	820	23.55	26.49	-0.79	-3.26	-0.79	-3.26	24.34	24.38	0.04	0.16
Southwest	1,180	220	9.73	9.03	0.19	1.96	0.19	1.96	9.54	9.32	-0.22	-2.30
Rocky Mountains	710	70	4.31	2.82	0.40	10.29	0.40	10.29	3.91	4.59	0.68*	17.39
Far West	1,620	410	11.74	12.14	-0.11	-0.91	-0.11	-0.91	11.85	11.47	-0.37	-3.16
Outlying areas	210	20	1.62	0.91	0.19*	13.39	0.19*	13.39	1.43	1.38	-0.05	-3.42
Institution total enrollment²												
4,760 or less	3,500	770	20.84	21.89	-0.28	-1.35	-0.28	-1.35	21.12	21.01	-0.11	-0.54
4,761–13,042	3,450	820	20.78	22.29	-0.41	-1.92	-0.41	-1.92	21.19	22.42	1.23	5.81
13,043–27,210	3,500	800	26.03	28.81	-0.75	-2.80	-0.75	-2.80	26.78	26.36	-0.42	-1.58
27,211 or more	3,560	660	32.35	27.00	1.44	4.66	1.44	4.66	30.91	30.21	-0.70	-2.25
Pell Grant status												
Received	5,580	1,100	25.39	23.49	0.51	2.05	0.51	2.05	24.88	22.12	-2.76*	-11.09
Did not receive	8,430	1,940	74.61	76.51	-0.51	-0.68	-0.51	-0.68	75.12	77.88	2.76*	3.67
Total Pell Grant amount received²												
\$1,580 or less	1,430	260	27.80	26.27	0.41	1.51	0.39	1.43	27.41	29.78	2.37*	8.64
\$1,581–\$2,695	1,360	300	25.03	28.63	-0.97	-3.74	-0.92	-3.54	25.94	26.36	0.42	1.62
\$2,696–\$4,310	1,400	250	22.32	16.49	1.57*	7.57	1.48*	7.12	20.84	21.00	0.16	0.78
\$4,311 or more	1,400	300	24.85	28.61	-1.01	-3.92	-0.96	-3.71	25.81	22.86	-2.95*	-11.43
Stafford Loan status												
Received	7,770	1,630	49.59	45.24	1.17	2.42	1.17	2.42	48.42	44.81	-3.61*	-7.46
Did not receive	6,250	1,410	50.41	54.76	-1.17	-2.27	-1.17	-2.27	51.58	55.19	3.61*	7.01

See notes at end of table.

Table M-5. Both student and transcript nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students overall: 2009—Continued

Variable	Before nonresponse adjustment								After nonresponse adjustment			
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Esti- mated bias	Rela- tive bias
	Respon- dents	Non- respon- dents	Respon- dents	Non- respon- dents	Esti- mated bias	Rela- tive bias	Esti- mated bias	Rela- tive bias	Before adjust- ments	After adjust- ments		
Total Stafford Loan amount received ²												
\$4,400 or less	1,960	400	23.30	25.42	-0.57	-2.39	-0.53	-2.23	23.83	24.01	0.18	0.75
\$4,401–\$5,500	3,780	720	50.06	39.66	2.80*	5.93	2.62*	5.52	47.44	48.00	0.56	1.18
\$5,501–\$6,417	160	30	1.89	2.82	-0.25	-11.58	-0.23	-10.91	2.13	2.22	0.09	4.39
\$6,418 or more	1,870	480	24.75	32.11	-1.98*	-7.42	-1.85*	-6.97	26.6	25.77	-0.83	-3.12
Total PLUS amount received ²												
\$5,000 or less	220	40	21.98	20.38	0.43	2.00	0.44	2.03	21.54	22.13	0.59	2.73
\$5,001–\$9,396	220	40	23.34	28.50	-1.39	-5.62	-1.41	-5.70	24.75	24.86	0.11	0.43
\$9,397–\$14,000	220	40	26.01	30.75	-1.28	-4.67	-1.29	-4.74	27.31	25.72	-1.59	-5.82
\$14,001 or more	210	50	28.66	20.37	2.23	8.45	2.27	8.59	26.40	27.29	0.89	3.39
Federal aid status												
Received	9,620	1,940	58.01	52.12	1.59*	2.81	1.59*	2.81	56.42	53.39	-3.04*	-5.38
Did not receive	4,390	1,110	41.99	47.88	-1.59*	-3.64	-1.59*	-3.64	43.58	46.61	3.04*	6.97
Institution aid status												
Received	7,270	1,380	43.22	30.76	3.36*	8.42	3.36*	8.42	39.87	40.49	0.62	1.56
Did not receive	6,740	1,660	56.78	69.24	-3.36*	-5.58	-3.36*	-5.58	60.13	59.51	-0.62	-1.03
State aid status												
Received	5,730	1,040	29.69	21.26	2.27*	8.29	2.27*	8.29	27.42	27.79	0.37	1.36
Did not receive	8,290	2,000	70.31	78.74	-2.27*	-3.13	-2.27*	-3.13	72.58	72.21	-0.37	-0.51
Any aid status												
Received	12,000	2,440	77.42	66.56	2.93*	3.93	2.93*	3.93	74.50	75.48	0.99	1.32
Did not receive	2,020	600	22.58	33.44	-2.93*	-11.48	-2.93*	-11.48	25.50	24.52	-0.99	-3.87

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington; Outlying Areas = American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, Palau, U.S. Virgin Islands.

² Undergraduate enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table M-6. Both student and transcript nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students in public institutions: 2009

Variable	Before nonresponse adjustment								After nonresponse adjustment			
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Esti- mated bias	Rela- tive bias
	Respon- dents	Non- respon- dents	Respon- dents	Non- respon- dents	Esti- mated bias	Rela- tive bias	Esti- mated bias	Rela- tive bias	Before adjust- ments	After adjust- ments		
Institution region¹												
New England	180	50	3.25	5.01	-0.48	-12.76	-0.45	-12.22	3.70	2.38	-1.32	-35.58
Mideast	1,230	300	13.43	15.17	-0.47	-3.39	-0.45	-3.23	13.87	14.76	0.89	6.40
Great Lakes	1,270	230	18.36	12.51	1.58	9.39	1.50	8.89	16.86	18.06	1.20	7.09
Plains	1,100	140	8.09	6.24	0.50	6.56	0.47	6.23	7.61	8.45	0.84*	11.06
Southeast	1,900	500	26.34	31.76	-1.46	-5.26	-1.39	-5.02	27.73	26.89	-0.83	-3.01
Southwest	780	150	10.93	10.73	0.05	0.50	0.05	0.47	10.88	10.65	-0.23	-2.09
Rocky Mountains	420	50	4.73	3.13	0.43	10.04	0.41	9.51	4.32	4.77	0.45	10.31
Far West	1,190	270	13.94	14.82	-0.24	-1.68	-0.23	-1.60	14.17	13.31	-0.86	-6.05
Outlying areas	90	10	0.94	0.62	0.09*	10.12	0.08	9.58	0.86	0.72	-0.13	-15.62
Institution total enrollment²												
11,664 or less	2,070	430	20.07	19.61	0.12	0.62	0.12	0.59	19.95	20.70	0.75	3.78
11,665–20,095	1,980	460	22.66	28.91	-1.69	-6.92	-1.60	-6.61	24.26	23.45	-0.82	-3.36
20,096–31,916	2,050	410	25.92	23.00	0.79	3.12	0.75	2.97	25.17	25.91	0.75	2.96
31,917 or more	2,050	400	31.36	28.48	0.78	2.54	0.74	2.41	30.62	29.94	-0.68	-2.23
Pell Grant status												
Received	3,310	650	26.22	24.89	0.36	1.38	0.34	1.32	25.88	22.34	-3.54*	-13.67
Did not receive	4,830	1,040	73.78	75.11	-0.36	-0.48	-0.34	-0.46	74.12	77.66	3.54*	4.77
Total Pell Grant amount received²												
\$1,560 or less	860	150	27.98	27.12	0.23	0.83	0.21	0.76	27.77	29.90	2.14	7.70
\$1,561–\$2,660	830	180	25.67	26.69	-0.27	-1.06	-0.25	-0.97	25.92	27.38	1.46	5.62
\$2,661–\$4,260	720	130	20.58	15.84	1.28	6.63	1.17	6.03	19.41	18.94	-0.47	-2.43
\$4,261 or more	900	190	25.77	30.35	-1.23	-4.57	-1.13	-4.20	26.90	23.78	-3.12*	-11.61
Stafford Loan status												
Received	4,160	810	44.52	38.58	1.60*	3.73	1.52*	3.55	43.00	39.86	-3.13*	-7.29
Did not receive	3,990	890	55.48	61.42	-1.60*	-2.81	-1.52*	-2.67	57.00	60.14	3.13*	5.50
Total Stafford Loan amount received²												
\$3,756 or less	1,030	210	22.40	27.23	-1.30	-5.49	-1.11	-4.73	23.51	22.60	-0.91	-3.89
\$3,757–\$5,500	2,080	360	51.02	40.92	2.72*	5.64	2.32*	4.77	48.70	49.90	1.20	2.47
\$5,501–\$5,850	30	10	0.52	0.49	0.01	1.75	0.01	1.49	0.51	0.63	0.11	21.88
\$5,851 or more	1,010	230	26.05	31.36	-1.43	-5.20	-1.22	-4.48	27.27	26.87	-0.40	-1.48

See notes at end of table.

Table M-6. Both student and transcript nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students in public institutions: 2009—Continued

Variable	Before nonresponse adjustment								After nonresponse adjustment			
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Esti- mated bias	Rela- tive bias
	Respon- dents	Non- respon- dents	Respon- dents	Non- respon- dents	Esti- mated bias	Rela- tive bias	Esti- mated bias	Rela- tive bias	Before adjust- ments	After adjust- ments		
Total PLUS amount received ²												
\$4,500 or less	100	20	23.85	22.98	0.23	0.99	0.21	0.88	23.65	24.54	0.89	3.78
\$4,501–\$7,438	90	20	25.81	34.20	-2.26	-8.05	-2.00	-7.19	27.81	25.80	-2.01	-7.22
\$7,439–\$12,000	100	20	25.19	32.27	-1.91	-7.04	-1.69	-6.28	26.87	26.11	-0.76	-2.84
\$12,001 or more	100	10	25.15	10.55	3.93*	18.54	3.48*	16.06	21.67	23.55	1.88	8.66
Federal aid status												
Received	5,350	1,020	53.26	46.36	1.86*	3.62	1.77*	3.43	51.49	48.71	-2.78*	-5.40
Did not receive	2,800	670	46.74	53.64	-1.86*	-3.82	-1.77*	-3.65	48.51	51.29	2.78*	5.73
Institution aid status												
Received	3,380	570	34.48	22.23	3.30*	10.58	3.14*	10.02	31.34	31.64	0.30	0.96
Did not receive	4,770	1,130	65.52	77.77	-3.30*	-4.80	-3.14*	-4.57	68.66	68.36	-0.30	-0.44
State aid status												
Received	3,350	570	30.03	19.92	2.73*	9.98	2.59*	9.45	27.44	27.77	0.33	1.19
Did not receive	4,800	1,130	69.97	80.08	-2.73*	-3.75	-2.59*	-3.57	72.56	72.23	-0.33	-0.45
Any aid status												
Received	6,660	1,270	73.23	60.80	3.35*	4.79	3.19*	4.55	70.04	70.84	0.80	1.14
Did not receive	1,480	420	26.77	39.20	-3.35*	-11.13	-3.19*	-10.65	29.96	29.16	-0.80	-2.67

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota;

Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington;

² Outlying Areas = American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, Palau, U.S. Virgin Islands.

² Undergraduate enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table M-7. Both student and transcript nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students in private nonprofit institutions: 2009

Variable	Before nonresponse adjustment						After nonresponse adjustment					
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Esti- mated bias	Rela- tive bias
	Respon- dents	Non- respon- dents	Respon- dents	Non- respon- dents	Esti- mated bias	Rela- tive bias	Esti- mated bias	Rela- tive bias	Before adjust- ments	After adjust- ments		
Institution region¹												
New England	550	90	15.25	12.28	0.80	5.54	0.85	5.94	14.40	13.94	-0.46	-3.19
Mideast	1,020	310	23.84	31.55	-2.08	-8.01	-2.22	-8.51	26.06	23.31	-2.76	-10.57
Great Lakes	830	200	14.93	12.89	0.55	3.83	0.59	4.09	14.34	14.94	0.60	4.22
Plains	670	120	9.87	11.15	-0.34	-3.38	-0.37	-3.60	10.24	9.51	-0.73	-7.15
Southeast	1,070	300	19.17	18.16	0.27	1.44	0.29	1.54	18.88	20.25	1.37	7.25
Southwest	290	30	4.35	2.80	0.42	10.62	0.45	11.42	3.91	5.23	1.32*	33.78
Rocky Mountains	260	20	3.23	1.73	0.41	14.36	0.43	15.48	2.80	3.72	0.92	33.00
Far West	350	110	6.79	7.90	-0.30	-4.22	-0.32	-4.49	7.11	6.45	-0.66	-9.32
Outlying areas	120	20	2.56	1.54	0.27	12.03	0.29	12.95	2.27	2.66	0.39	17.28
Institution total enrollment²												
2,515 or less	1,300	290	28.97	29.14	-0.05	-0.16	-0.05	-0.18	29.02	25.01	-4.01*	-13.81
2,516–4,877	1,290	290	22.05	18.99	0.83	3.89	0.88	4.16	21.17	23.07	1.90	8.99
4,878–11,571	1,210	370	20.87	24.57	-1.00	-4.56	-1.07	-4.86	21.93	22.09	0.16	0.71
11,572 or more	1,340	240	28.12	27.30	0.22	0.79	0.24	0.84	27.88	29.83	1.95	6.99
Pell Grant status												
Received	1,910	390	23.94	22.58	0.37	1.55	0.39	1.66	23.55	21.32	-2.23*	-9.46
Did not receive	3,230	810	76.06	77.42	-0.37	-0.48	-0.39	-0.51	76.45	78.68	2.23*	2.91
Total Pell Grant amount received²												
\$1,640 or less	480	90	26.65	31.08	-1.19	-4.28	-1.22	-4.38	27.87	29.08	1.21	4.35
\$1,641–\$2,860	490	110	25.15	27.92	-0.75	-2.88	-0.76	-2.95	25.92	25.18	-0.73	-2.83
\$2,861–\$4,310	450	80	21.52	12.43	2.45*	12.85	2.51*	13.20	19.01	20.80	1.79	9.41
\$4,311 or more	490	110	26.67	28.57	-0.51	-1.88	-0.52	-1.93	27.20	24.93	-2.27	-8.34
Stafford Loan status												
Received	3,110	710	58.05	52.75	1.43	2.52	1.52	2.70	56.52	51.30	-5.22*	-9.24
Did not receive	2,030	480	41.95	47.25	-1.43	-3.29	-1.52	-3.51	43.48	48.70	5.22*	12.01
Total Stafford Loan amount received²												
\$5,500 or less	2,360	500	77.36	62.86	3.91*	5.32	3.89*	5.30	73.47	74.28	0.81	1.10
\$5,501 or more	750	210	22.64	37.14	-3.91*	-14.72	-3.89*	-14.67	26.53	25.72	-0.81	-3.06

See notes at end of table.

Table M-7. Both student and transcript nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students in private nonprofit institutions: 2009—Continued

Variable	Before nonresponse adjustment								After nonresponse adjustment			
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Esti- mated bias	Rela- tive bias
	Respon- dents	Non- respon- dents	Respon- dents	Non- respon- dents	Esti- mated bias	Rela- tive bias	Esti- mated bias	Rela- tive bias	Before adjust- ments	After adjust- ments		
Total PLUS amount received ²												
\$6,225 or less	110	20	18.60	5.53	3.52*	23.34	3.69*	24.75	14.91	17.81	2.90	19.43
\$6,226–\$11,000	120	20	24.74	28.49	-1.01	-3.92	-1.06	-4.11	25.80	26.24	0.44	1.71
\$11,001–\$16,096	100	30	23.54	44.23	-5.57	-19.14	-5.84	-19.88	29.39	23.16	-6.23	-21.19
\$16,097 or more	110	20	33.12	21.75	3.06	10.19	3.21	10.74	29.91	32.79	2.89	9.66
Federal aid status												
Received	3,710	790	65.91	59.06	1.85	2.88	1.97	3.08	63.94	59.99	-3.96*	-6.19
Did not receive	1,430	400	34.09	40.94	-1.85	-5.14	-1.97	-5.47	36.06	40.01	3.96*	10.97
Institution aid status												
Received	3,700	780	64.90	48.35	4.46*	7.38	4.76*	7.91	60.14	61.11	0.97	1.62
Did not receive	1,440	410	35.10	51.65	-4.46*	-11.27	-4.76*	-11.94	39.86	38.89	-0.97	-2.44
State aid status												
Received	2,180	440	31.00	25.34	1.53	5.17	1.63	5.54	29.37	29.73	0.36	1.24
Did not receive	2,960	750	69.00	74.66	-1.53	-2.16	-1.63	-2.31	70.63	70.27	-0.36	-0.52
Any aid status												
Received	4,680	1,030	84.81	74.55	2.76*	3.37	2.95*	3.60	81.86	83.34	1.48	1.81
Did not receive	460	160	15.19	25.45	-2.76*	-15.39	-2.95*	-16.26	18.14	16.66	-1.48	-8.16

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota;

Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington;

² Outlying Areas = American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, Palau, U.S. Virgin Islands.

² Undergraduate enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table M-8. Both student and transcript nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students in private for-profit institutions: 2009

Variable	Before nonresponse adjustment								After nonresponse adjustment			
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Estimated bias	Relative bias
	Respondents	Non-respondents	Respondents	Non-respondents	Estimated bias	Relative bias	Estimated bias	Relative bias	Before adjustments	After adjustments		
Institution region¹												
New England	†	†	†	†	†	†	†	†	†	†	†	†
Mideast	150	30	8.26	9.50	-0.33	-3.88	-0.39	-4.54	8.65	13.75	5.09*	58.88
Great Lakes	110	30	11.70	16.17	-1.20	-9.33	-1.42	-10.80	13.12	8.63	-4.49	-34.20
Plains	100	10	6.24	4.43	0.49	8.51	0.58	10.17	5.67	6.93	1.26	22.27
Southeast	130	30	14.73	22.38	-2.06	-12.27	-2.42	-14.13	17.16	19.32	2.16	12.58
Southwest	110	30	32.31	31.06	0.34	1.05	0.40	1.24	31.92	20.07	-11.85	-37.13
Rocky Mountains	40	10	6.06	6.49	-0.11	-1.85	-0.13	-2.17	6.20	8.20	2.00	32.27
Far West	90	30	15.96	9.98	1.61	11.25	1.90	13.50	14.07	21.82	7.75*	55.11
Outlying areas	10	#	4.71	#	1.27	36.88	1.49	46.43	3.22	1.28	-1.94	-60.27
Institution total enrollment²												
1,972 or less	200	30	20.02	9.75	2.77	16.05	3.26	19.44	16.77	23.01	6.24	37.24
1,973–3,355	160	50	11.96	29.53	-4.73	-28.36	-5.57	-31.79	17.53	16.92	-0.61	-3.47
3,356–8,142	190	30	11.87	17.41	-1.49	-11.17	-1.76	-12.89	13.63	20.71	7.08*	51.96
8,143 or more	180	40	56.14	43.31	3.46	6.56	4.07	7.81	52.07	39.36	-12.72*	-24.42
Pell Grant status												
Received	360	70	23.73	13.80	2.68	12.72	3.15	15.31	20.58	24.65	4.07	19.76
Did not receive	370	90	76.27	86.20	-2.68	-3.39	-3.15	-3.97	79.42	75.35	-4.07	-5.12
Total Pell Grant amount received²												
\$1,480 or less	90	20	34.29	16.25	4.86	16.52	3.84	12.59	30.45	38.35	7.90	25.93
\$1,481–\$2,873	90	20	33.42	37.67	-1.15	-3.31	-0.90	-2.63	34.33	31.19	-3.14	-9.15
\$2,874–\$4,310	80	10	16.56	28.92	-3.33	-16.74	-2.63	-13.69	19.19	16.86	-2.33	-12.13
\$4,311 or more	100	20	15.73	17.16	-0.39	-2.39	-0.30	-1.90	16.03	13.60	-2.43	-15.16
Stafford Loan status												
Received	500	120	62.02	70.35	-2.24	-3.49	-2.64	-4.09	64.67	66.34	1.67	2.58
Did not receive	230	40	37.98	29.65	2.24	6.28	2.64	7.48	35.33	33.66	-1.67	-4.73
Total Stafford Loan amount received²												
\$3,938 or less	130	30	20.96	25.89	-1.33	-5.97	-1.70	-7.51	22.66	29.12	6.46	28.50
\$3,939–\$5,500	130	20	23.29	31.23	-2.14	-8.41	-2.74	-10.52	26.03	26.47	0.43	1.66
\$5,501–\$10,500	240	60	35.17	42.88	-2.08	-5.58	-2.66	-7.03	37.83	43.02	5.19	13.72
\$10,501 or more	10	#	20.58	#	5.55	36.88	7.10	52.67	13.48	1.40	-12.08	-89.61

See notes at end of table.

Table M-8. Both student and transcript nonresponse bias before nonresponse adjustment and after weight adjustments for selected variables for students in private for-profit institutions: 2009—Continued

Variable	Before nonresponse adjustment								After nonresponse adjustment			
	Unweighted		Weighted mean		Respondents compared with nonrespondents		Respondents compared with overall sample		Overall mean		Esti- mated bias	Rela- tive bias
	Respon- dents	Non- respon- dents	Respon- dents	Non- respon- dents	Esti- mated bias	Rela- tive bias	Esti- mated bias	Rela- tive bias	Before adjust- ments	After adjust- ments		
Total PLUS amount received ²												
\$5,000 or less	10	#	32.22	80.94	-13.13	-28.95	-34.98	-52.05	67.19	29.66	-37.53	-55.85
\$5,001–\$8,292	10	#	24.52	11.66	3.46	16.45	9.23	60.35	15.29	25.84	10.55	69.00
\$8,293–\$11,737	10	#	6.30	0.15	1.66	35.72	4.42	234.71	1.88	6.56	4.68	248.5
\$11,738 or more	10	#	36.97	7.25	8.01	27.64	21.33	136.42	15.64	37.94	22.30	142.64
Federal aid status												
Received	570	120	69.70	70.92	-0.33	-0.47	-0.39	-0.55	70.09	70.54	0.46	0.65
Did not receive	160	40	30.30	29.08	0.33	1.10	0.39	1.29	29.91	29.46	-0.46	-1.53
Institution aid status												
Received	200	40	10.88	10.49	0.11	0.98	0.12	1.15	10.75	15.63	4.88*	45.37
Did not receive	530	120	89.12	89.51	-0.11	-0.12	-0.12	-0.14	89.25	84.37	-4.88*	-5.47
State aid status												
Received	210	30	14.54	9.33	1.40	10.69	1.65	12.82	12.88	14.39	1.51	11.68
Did not receive	520	130	85.46	90.67	-1.40	-1.62	-1.65	-1.90	87.12	85.61	-1.51	-1.73
Any aid status												
Received	650	140	84.65	78.44	1.67	2.02	1.97	2.38	82.68	83.31	0.63	0.76
Did not receive	80	20	15.35	21.56	-1.67	-9.83	-1.97	-11.37	17.32	16.69	-0.63	-3.61

† Not applicable.

Rounds to zero.

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Midwest = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota;

Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = Alaska, California, Hawaii, Nevada, Oregon, Washington;

Outlying Areas = American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Puerto Rico, Palau, U.S. Virgin Islands.

² Undergraduate enrollment, Pell Grant amount, and Stafford Loan amount categories were defined by quartiles.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table M-9. Nonresponse bias analysis for the item B1ADMSUP (Teacher satisfaction: Administrative support), B&B:08/09: 2009

	Unweighted respondents	Unweighted non-respondents	Respondent mean weighted	Non-respondent mean weighted	Estimated bias	Relative bias
Bachelor's degree institution control						
Public	1,290	300	62.79	53.25	2.03	3.34
Private nonprofit	740	220	36.00	39.17	-0.67	-1.84
Private for-profit	30	40	1.22	7.58	-1.35	-52.62*
Institution region ¹						
New England	100	20	4.97	3.97	0.21	4.46*
Mideast	360	80	17.58	14.98	0.55	3.25
Great Lakes	340	70	16.61	12.09	0.96	6.13
Plains	250	50	12.08	9.39	0.57	4.97
Southeast	520	140	25.33	24.55	0.17	0.66
Southwest	190	50	9.06	9.21	-0.03	-0.34
Rocky Mountains	70	30	3.51	5.23	-0.37	-9.48
Far West	200	60	9.84	10.47	-0.13	-1.34
Other Jurisdictions	20	60	1.02	10.11	-1.93	-65.37*
Institution total enrollment ²						
4,724 or less	480	170	23.48	31.05	-1.61	-6.41
4,725–13,042	570	150	27.81	27.44	0.08	0.29
13,043–27,210	560	120	27.23	21.30	1.26	4.85
27,211 or more	440	110	21.48	20.22	0.27	1.27
Aid received						
Yes	1,760	440	85.73	79.60	1.30	1.54*
No	290	110	14.27	20.40	-1.30	-8.36*
Any institution aid received						
Yes	1,100	220	53.58	38.81	3.14	6.22*
No	950	340	46.42	61.19	-3.14	-6.33*
Any state aid received						
Yes	880	200	42.91	35.56	1.56	3.78*
No	1,170	360	57.09	64.44	-1.56	-2.66*
Federal aid status						
Received	1,400	380	68.39	67.69	0.15	0.22*
Did not receive	650	180	31.61	32.31	-0.15	-0.47*
Pell Grant status						
Received	740	240	35.80	42.78	-1.48	-3.98
Did not receive	1,320	320	64.20	57.22	1.48	2.36
Total Pell Grant amount received ²						
\$1,560 or less	190	60	9.40	10.11	-0.15	-1.57
\$1,561–\$2,745	210	60	10.38	11.37	-0.21	-2.00
\$2,746–\$4,309	170	60	8.33	10.29	-0.42	-4.76
\$4,310 or more	160	60	7.70	11.01	-0.70	-8.39
Stafford Loan status						
Received	1,170	290	57.14	52.71	0.94	1.67*
Did not receive	880	260	42.86	47.29	-0.94	-2.15*

See notes at end of table.

Table M-9. Nonresponse bias analysis for the item B1ADMSUP (Teacher satisfaction: Administrative support), B&B:08/09: 2009—Continued

	Unweighted respondents	Unweighted non- respondents	Respondent mean weighted	Non- respondent mean weighted	Estimated bias	Relative bias
Total Stafford Loan amount received ²						
\$4,410 or less	310	70	15.15	13.36	0.38	2.58
\$4,411–\$5,500	560	130	27.33	23.29	0.86	3.24*
\$5,501–\$6,119	20	#	0.78	0.54	0.05	6.93
\$6,120 or more	290	90	13.88	15.52	-0.35	-2.45
Total PLUS loan amount received ²						
\$5,000 or less	40	10	1.75	1.44	0.07	3.90
\$5,001–\$9,396	30	10	1.61	1.62	0.00	-0.23
\$9,397–\$14,000	30	10	1.46	1.44	0.00	0.25
\$14,001 or more	20	10	0.83	1.08	-0.05	-6.14

Rounds to zero.

* $p < .05$

¹ New England = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; Mideast = Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania; Great Lakes = Illinois, Indiana, Michigan, Ohio, Wisconsin; Plains = Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; Southeast = Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia; Southwest = Arizona, New Mexico, Oklahoma, Texas; Rocky Mountains = Colorado, Idaho, Montana, Utah, Wyoming; Far West = California, Nevada, Oregon, Washington; Outlying Areas = Alaska, Hawaii, and Puerto Rico. Alaska and Hawaii were reclassified from the West to the Outlying Areas for the purposes of NPSAS.

² Categories were formed from continuous variables using quartiles.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table M-10. Summary of item nonresponse bias analysis for the B&B:08/09 interview variables that have less than 85 percent response rate: 2009

Variable	Label	Mean percent relative bias	Median percent relative bias	Percent of biases that are statistically significant	Percent difference in preimputation and postimputation means
B1ADMSUP	Teacher satisfaction: Administrative support	6.22	3.25	35.0	0.01
B1APCOMP	Reason didn't apply for a teaching position: Application difficult	4.31	2.43	30.0	0.06
B1CART	Content area certification: Arts and music	9.11	4.09	35.0	0.03*
B1CENGL	Content area certification: English or language arts	9.11	4.09	35.0	0.02*
B1CESL	Content area certification: English as a second language	9.11	4.09	35.0	#
B1CFLNG	Content area certification: Foreign languages	9.11	4.09	35.0	0.01
B1CGENA	Content area certification: Elementary education	9.11	4.09	35.0	#
B1CGENB	Content area certification: Secondary education	9.11	4.09	35.0	0.01
B1CHELTH	Content area certification: Health/physical education	9.11	4.09	35.0	0.04
B1CLSIZE	Teacher satisfaction: Class size	6.22	3.25	35.0	0.02*
B1CMATH	Content area certification: Math or computer science	9.11	4.09	35.0	0.01
B1CMNT01	First teaching job: Received help working with parents and community	8.96	4.75	35.0	0.01
B1COTHER	Content area certification: Other	9.11	4.09	35.0	0.01
B1CRTMY	Date first certified to teach	9.11	4.13	35.0	#
B1CSCIEN	Content area certification: Natural sciences	9.11	4.09	35.0	0.03
B1CSOSCI	Content area certification: Social sciences	9.11	4.09	35.0	#
B1CSPCED	Content area certification: Special education	9.11	4.09	35.0	0.02
B1CURCAR	Non-career job in 2009: Exploring career options	6.34	3.58	27.5	0.01
B1CURCRT	Certified to teach at K–12 level in 2009	4.34	2.22	32.5	0.01*
B1CUREDU	Non-career job in 2009: Working to prepare for education	6.34	3.58	27.5	0.02
B1CUREST	Non-career job in 2009: Continuing job held before graduating	6.34	3.58	27.5	#
B1CURFUT	Non-career job in 2009: Deciding on future	6.34	3.58	27.5	0.01
B1CURINT	Non-career job in 2009: Pursuing other interests	6.34	3.58	27.5	0.01
B1CUROTH	Non-career job in 2009: Other description	6.34	3.58	27.5	0.02
B1CURPAY	Non-career job in 2009: Just paying the bills	6.34	3.58	27.5	0.01
B1CURSCH	Non-career job in 2009: Job while in school	16.17	12.51	25.0	0.03
B1CVOCTC	Content area certification: Vocational/career/technical education	9.11	4.09	35.0	0.02*
B1DAGE	Age of youngest dependent in 2009	9.43	3.39	35.0	0.05*
B1DISC01	First teaching job: Received help disciplining students	8.96	4.75	35.0	0.02
B1DSCP01	First teaching job: Felt prepared to manage classroom	8.70	4.71	40.0	0.01
B1ENR09	Current 2009 job, total school K–12 enrollment	3.86	2.46	2.5	0.01
B1ENR1	First job, total school K–12 enrollment	3.97	2.13	2.5	#
B1FAM	Reason didn't apply for a teaching position: Personal reasons	4.31	2.43	30.0	0.02*
B1ICAM01	Time frame for base salary in [REJBTP01] position	9.54	4.31	37.5	0.06
B1ICAM02	Time frame for base salary in [REJBTP02] position	17.53	9.67	20.0	0.12*
B1ICAM03	Time frame for base salary in [REJBTP03] position	40.34	23.07	17.5	0.19
B1ICAM04	Time frame for base salary in [REJBTP04] position	87.75	100.00	60.0	#
B1ICAM06	Time frame for base salary in [REJBTP06] position	126.01	100.00	97.5	#
B1ICAM07	Time frame for base salary in [REJBTP07] position	126.01	100.00	97.5	#

See notes at end of table.

Table M-10. Summary of item nonresponse bias analysis for the B&B:08/09 interview variables that have less than 85 percent response rate: 2009—Continued

Variable	Label	Mean percent relative bias	Median percent relative bias	Percent of biases that are statistically significant	Percent difference in preimputation and postimputation means
B1INCSP	Spouse's income in 2008	3.60	1.71	32.5	#
B1IND01	Participated in formal teacher induction program in first teaching job	8.33	4.45	40.0	0.01
B1INT01	Participated in teacher internship program in first teaching job	8.74	4.47	40.0	#
B1INVR01	First teaching job: Felt prepared to use instructional methods	8.70	4.71	40.0	0.01
B1JBCR01	Working in K–12 teaching position 1 in 2009	6.34	3.11	37.5	0.01
B1JBCR02	Working in K–12 teaching position 2 in 2009	15.48	9.16	17.5	0.02
B1JBCR03	Working in K–12 teaching position 3 in 2009	35.20	15.04	20.0	0.06
B1JBCR04	Working in K–12 teaching position 4 in 2009	81.90	100.00	60.0	#
B1JBCR05	Working in K–12 teaching position 5 in 2009	121.63	100.00	97.5	#
B1JBCR06	Working in K–12 teaching position 6 in 2009	126.01	100.00	97.5	#
B1JBCR07	Working in K–12 teaching position 7 in 2009	126.01	100.00	97.5	#
B1JBIC01	Base salary in [REJBTP01] position	9.58	4.36	37.5	0.09*
B1JBIC02	Base salary in [REJBTP02] position	17.62	10.60	20.0	0.02
B1JBIC03	Base salary in [REJBTP03] position	40.34	23.07	17.5	0.04
B1JBIC04	Base salary in [REJBTP04] position	87.75	100.00	60.0	0.01
B1JBIC06	Base salary in [REJBTP06] position	126.01	100.00	97.5	#
B1JBIC07	Base salary in [REJBTP07] position	126.01	100.00	97.5	#
B1JBOS01	Other school-related income while in [REJBTP01] position	9.07	3.32	22.5	0.16
B1JBOS02	Other school-related income while in [REJBTP02] position	17.70	10.83	15.0	0.05
B1JBOS03	Other school-related income while in [REJBTP03] position	37.18	17.56	17.5	0.21
B1JBOS04	Other school-related income while in [REJBTP04] position	87.75	100.00	60.0	#
B1JBOS06	Other school-related income while in [REJBTP06] position	126.01	100.00	97.5	#
B1JBOS07	Other school-related income while in [REJBTP07] position	126.01	100.00	97.5	#
B1JBTP01	Type of first K–12 teaching position after 2007–08 bachelor's degree	6.28	2.81	37.5	0.02*
B1JBTP02	Type of second K–12 teaching position after 2007–08 bachelor's degree	15.48	9.16	17.5	0.06*
B1JBTP03	Type of third K–12 teaching position after 2007–08 bachelor's degree	35.20	15.04	20.0	0.09
B1JBTP04	Type of fourth K–12 teaching position after 2007–08 bachelor's degree	81.90	100.00	60.0	#
B1JBTP05	Type of fifth K–12 teaching position after 2007–08 bachelor's degree	121.63	100.00	97.5	#
B1JBTP06	Type of sixth K–12 teaching position after 2007–08 bachelor's degree	126.01	100.00	97.5	#
B1JBTP07	Type of seventh K–12 teaching position after 2007–08 bachelor's degree	126.01	100.00	97.5	#
B1LNEDU	Undergrad loan debt influenced employment 2009: Work instead of school	6.91	4.05	47.5	0.01
B1LNFRGV	Aware of teacher loan forgiveness programs	2.86	1.42	32.5	#
B1LNINCT	Teacher loan forgiveness programs influential	8.83	4.55	32.5	0.01

See notes at end of table.

Table M-10. Summary of item nonresponse bias analysis for the B&B:08/09 interview variables that have less than 85 percent response rate: 2009—Continued

Variable	Label	Mean percent relative bias	Median percent relative bias	Percent of biases that are statistically significant	Percent difference in preimputation and postimputation means
B1LNINHR	Undergrad loan debt influenced employment 2009: Worked more hours	6.91	4.05	47.5	0.01
B1LNINJB	Undergrad loan debt influenced employment 2009: Less desirable job	6.91	4.05	47.5	0.01
B1LNINMR	Undergrad loan debt influenced employment 2009: More than one job	6.91	4.05	47.5	0.01
B1LNINOT	Undergraduate loan debt influenced employment in 2009: Other reasons	6.91	4.05	47.5	0.01
B1LNINST	Undergrad loan debt influenced employment 2009: Job outside field	6.91	4.05	47.5	#
B1LNPRT	Participated in teacher loan forgiveness program	10.86	6.26	30.0	0.05
B1LVCAR	Why left teaching: Dissatisfied with teaching or wanted another career	11.33	6.98	32.5	0.02
B1LVCOND	Why left teaching: Workplace conditions	11.33	6.98	32.5	0.01
B1LVOTH	Why left teaching: Other reasons	11.33	6.98	32.5	#
B1LVPERS	Why left teaching: Personal reasons	11.33	6.98	32.5	0.02
B1LVSAL	Why left teaching: Inadequate salary/benefits	11.33	6.98	32.5	0.02*
B1LVTRSF	Why left teaching: Laid off or involuntarily transferred	11.33	6.98	32.5	0.03
B1MAIN	Main disability in 2009	7.53	4.78	37.5	0.05*
B1MISC	Content area certification: Miscellaneous	9.11	4.09	35.0	0.02*
B1MORED	Reason didn't apply for a teaching position: Needed more education	4.31	2.43	30.0	0.01
B1MORMON	Reason didn't apply for a teaching position: Didn't offer enough money	4.31	2.43	30.0	0.01
B1MOVE	Plan to move into non-teaching job in K–12 education	4.40	2.64	27.5	0.01
B1MSPE02	Field of study for second post-bachelor's degree program enrollment	6.58	4.45	22.5	#
B1MSPE03	Field of study for third post-bachelor's degree program enrollment	20.68	19.15	10.3	0.01
B1MTH01	Subjects taught in [REJBTP01] position: math or computer science	8.67	4.83	40.0	0.01
B1NATIVE	Native language other than English	11.13	9.11	40.0	0.01*
B1NSF11	Foreign citizenship in 2009	18.02	14.87	17.5	#
B1NSFCHG	Working outside bachelor's field in 2009: Career change	3.03	1.65	27.5	#
B1NSFCON	Working outside bachelor's field: Working conditions	3.03	1.65	27.5	#
B1NSFFAM	Working outside bachelor's field: Family-related	3.03	1.65	27.5	#
B1NSFFLD	Working outside bachelor's field: No job in degree field	3.03	1.65	27.5	#
B1NSFLOC	Reason working outside bachelor's field: job location	3.03	1.65	27.5	0.01
B1NSFOFR	Working outside bachelor's field: Other	3.03	1.65	27.5	0.01
B1NSFPAY	Working outside bachelor's field: Pay/promotion opportunities	3.03	1.65	27.5	0.01
B1NTPAY	Reason not currently repaying undergraduate loans	4.98	3.55	45.0	0.06*
B1OFFER	Received any offers for teaching positions	14.56	10.32	25.0	0.03

See notes at end of table.

Table M-10. Summary of item nonresponse bias analysis for the B&B:08/09 interview variables that have less than 85 percent response rate: 2009—Continued

Variable	Label	Mean percent relative bias	Median percent relative bias	Percent of biases that are statistically significant	Percent difference in preimputation and postimputation means
B1OSAM01	Time frame for other school-related income in [REJBTP01] position	17.12	10.63	25.0	0.15
B1OSAM02	Time frame for other school-related income in [REJBTP02] position	32.48	20.64	17.5	0.29
B1OSAM03	Time frame for other school-related income in [REJBTP03] position	86.40	27.09	32.5	0.05
B1OTHRSN	Reason didn't apply for a teaching position: Another reason not listed	4.31	2.43	30.0	#
B1PLNTCH	Plan to teach in K–12 classroom in future	38.11	20.87	22.5	0.07
B1PMIN09	Current 2009 job, percent minority enrollment	3.84	2.33	2.5	0.02
B1PMIN1	First job, percent minority enrollment	3.97	2.17	2.5	0.02
B1PNTSUP	Teacher satisfaction: Parent support	6.22	3.25	35.0	0.01
B1PREF	Reason didn't apply for a teaching position: Preferred other career	4.31	2.43	30.0	#
B1RSEMP	Reason for non-degree coursework: current employment	5.74	3.03	17.5	0.01
B1RSGOAL	Reason for non-degree coursework: long-term goals	5.74	3.03	17.5	0.01
B1RSOTH	Reason for non-degree coursework: other	5.74	3.03	17.5	#
B1RSPERS	Reason for non-degree coursework: personal enrichment	5.74	3.03	17.5	#
B1SIZE09	Current 2009 job, school enrollment size (matches B&B:01)	3.86	2.46	2.5	0.01
B1SIZE1	First job, school enrollment size (matches B&B:01)	3.97	2.13	2.5	#
B1SOACPR	Stopped out before bachelor's due to academic problems	4.76	1.45	17.5	0.01
B1SOCSUP	Teacher satisfaction: Relationships with colleagues and supervisors	6.22	3.25	35.0	0.02*
B1SOENOT	Stopped out before bachelor's to enroll elsewhere	4.69	1.36	17.5	#
B1SOFAMC	Stopped out before bachelor's due to change in family status	4.78	1.54	15.0	0.02*
B1SOJBML	Stopped out before bachelor's due to conflict with job or military	4.78	1.45	17.5	0.02
B1SOOFIN	Stopped out before bachelor's for other financial reasons	4.71	1.42	17.5	0.02
B1SOOTH	Stopped out before bachelor's for another reason	4.75	1.56	10.0	0.01
B1SOPERS	Stopped out before bachelor's for personal reasons	4.80	1.51	17.5	0.01
B1SOTMOF	Stopped out before bachelor's because needed time off from studying	4.76	1.42	17.5	0.02
B1SOWRK	Stopped out before bachelor's because needed to work	4.83	1.45	17.5	0.01
B1SPAMT	Spouse's student loan amount	5.65	3.78	35.0	0.02
B1SPOWE	Spouse's loan amount owed as of 2009	5.33	3.14	32.5	0.06*
B1STCOMP	Completed student teaching or teacher practicum as of 2009	5.24	3.03	27.5	0.01
B1STDISP	Teacher satisfaction: Student discipline	6.22	3.25	35.0	0.01
B1STTC01	Held any other teaching positions after working as [REJBTP01]	6.33	3.06	37.5	0.02
B1STTC02	Held any other teaching positions after working as [REJBTP02]	15.48	9.16	17.5	#

See notes at end of table.

Table M-10. Summary of item nonresponse bias analysis for the B&B:08/09 interview variables that have less than 85 percent response rate: 2009—Continued

Variable	Label	Mean percent relative bias	Median percent relative bias	Percent of biases that are statistically significant	Percent difference in preimputation and postimputation means
B1STTC03	Held any other teaching positions after working as [REJBTP03]	35.20	15.04	20.0	0.05
B1STTC04	Held any other teaching positions after working as [REJBTP04]	81.90	100.00	60.0	#
B1STTC05	Held any other teaching positions after working as [REJBTP05]	121.63	100.00	97.5	#
B1STTC06	Held any other teaching positions after working as [REJBTP06]	126.01	100.00	97.5	#
B1STTC07	Held any other teaching positions after working as [REJBTP07]	126.01	100.00	97.5	#
B1TCH01	First teaching job: Felt prepared to teach subject matter	8.70	4.71	40.0	0.04
B1TCHAPP	Applied for K–12 teaching position since bachelor's degree completion	3.80	2.12	30.0	#
B1TCH EFF	Teacher satisfaction: Effectiveness as a teacher	6.22	3.25	35.0	#
B1TCHGRT	Aware of TEACH Grant Program	2.86	1.39	32.5	0.01
B1TCHNO	Reason didn't apply for a teaching position: Did not like teaching	4.31	2.43	30.0	#
B1WRKHRS	Hours worked weekly while enrolled	3.26	1.30	17.5	0.03*
B1ICAM05	Time frame for base salary in [REJBTP05] position	†	†	†	†
B1JBIC05	Base salary in [REJBTP05] position	†	†	†	†
B1JBOS05	Other school-related income while in [REJBTP05] position	†	†	†	†
B1OSAM05	Time frame for other school-related income in [REJBTP05] position	†	†	†	†

† Not applicable.

Rounds to zero.

* $p < .05$

NOTE: The means and medians are computed over the absolute values of the bias and percent relative bias. The bias was computed using the B&B:08/09 Interview analysis weight. B&B:01 = 2000–2001 Baccalaureate and Beyond Longitudinal Study. TEACH = Teacher Education Assistance for College and Higher Education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).

Table M-11. Summary of item nonresponse bias analysis for the B&B:08/09 student-level derived transcript variables that have less than 85 percent response rate: 2009

Variable	Transcript label	Mean percent relative bias	Median percent relative bias	Percent of biases that are statistically significant
QBHSMY	High school graduation date (year and month)	20.09	12.05	40.0
QECLCGPA	Calculus/advanced math: GPA	4.04	3.38	5.0
QECSCGPA	Computer science: GPA	3.28	2.05	17.5
QELABGPA	Introductory laboratory science: GPA	4.28	3.66	22.5
QEMATGPA	College-level mathematics: GPA	2.34	1.96	10.0
QEPMAGPA	Pre-college level mathematics: GPA	6.90	3.31	7.5
QEPSYGPA	Psychology: GPA	2.86	2.01	12.5
QESPTGPA	Sports/PE/recreation: GPA	7.56	3.24	22.5
QESTTGPA	Student teaching: GPA	13.01	7.21	7.7

NOTE: The means and medians are computed over the absolute values of the bias and percent relative bias. The bias was computed using the B&B:08/09 student transcript analysis weight. GPA = grade point average. PE = physical education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Longitudinal Study (B&B:08/09).