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ABSTRACT

The National Longitudinal Study of the High School Class of 1972 (NLS-72) is the "grandmother" of the longitudinal studies designed and conducted by the National Center for Education Statistics, and is probably the richest archive ever assembled on a generation of Americans. Participants were selected as high school seniors in 1972 and were followed through postsecondary transcripts in 1984. In 1981, Samuel Peng assembled a bibliography of studies describing or using NLS-72 data. This publication extends Peng's work by describing the considerable number of studies published since the first bibliography. Works are arranged in the following categories: (1) general descriptions (data sets and populations); (2) methodology; (3) work (employment); (4) secondary education; (5) postsecondary education; (6) educational and occupational aspirations; (7) educational and occupational attainment; (8) gender and racial-ethnic differences; (9) vocational technical and vocational education; (10) teachers; (11) marriage, family, and life transitions; (12) economics of education; (13) testing; (14) others; and (15) tabulations. In all, 259 sources are listed and annotated with a brief description of the study and its methodology. Publication of this document coincides roughly with the release of an optical data disk with the NLS-72 data archive, manuals, and sample computer programs. (SLD)

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The National Longitudinal Study of the High School Class of 1972

Annotated Bibliography of Studies, 1980-1992

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**The
National
Longitudinal Study
of the High School
Class of 1972**

Annotated
Bibliography of Studies,
1980-1992

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Preface

The National Longitudinal Study of the High School Class of 1972 (NLS-72) is the grandmother of the longitudinal studies designed and conducted by the National Center for Education Statistics (NCES) of the U.S. Department of Education. At this point in time (1993), it is probably the richest archive ever assembled on a single generation of Americans.

Participants in the study were selected when they were seniors in high school in the spring of 1972, and in a supplementary sample drawn in 1973. The records include the "Base Year" survey; follow-up surveys in 1973, 1974, 1976, 1979, and 1986; high school records; and postsecondary transcripts (collected in 1984).

Researchers have drawn on this archive since its inception. The history of the Class of '72 from its high school years through its early 30s is widely considered as the baseline against which the progress and achievements of subsequent cohorts will be measured. The principal comparisons drawn to date have been to the second in the series of NCES longitudinal studies, the High School and Beyond cohorts of 1980 (seniors and sophomores in that year). In the future, researchers will also compare these generations to the eighth graders of the National Education Longitudinal Study of 1988.

In 1981, Samuel Peng of NCES assembled an annotated bibliography of studies describing or using NLS-72 data (Taylor, Mary Ellen et al. National Longitudinal Study of the High School Class of 1972 Study Reports Update: Review and Annotation ED 218 314). The period covered by this document was 1972 through 1981. Our intent in these pages is to update this work by identifying and describing the considerable number of studies using the NLS-72 published since Peng's work.

We do not pretend to have captured everything that has been written about the NLS-72 since 1980. In particular, we are probably missing many dissertations that did not turn up on the major radar screens of publications and public access documents. Nonetheless, we hope to make life easier for researchers and other interested parties in terms of their hunt for relevant literature.

The publication of this document will coincide (roughly) with the release, by NCES, of a CD-ROM containing the entire NLS-72 data archive, user's manuals and guides, and sample computer programs to help analysts configure the data.

Acknowledgments

A number of people contributed to the development of this collection. Thomas Calhoun ran the original ERIC searches when he served as a summer intern in the U.S. Department of Education's Office of Research in 1991. Cliff Adelman, Aurora D'Amico, and Jeff Owings of the Department's Office of Educational Research and Improvement provided helpful reviews and/or found additional fugitive materials. Dan Goldenberg of the Department of Education's Office of Policy and Planning and Ron Cervero of the University of Georgia also offered useful feedback and reviews. Maggie McNeely provided editorial guidance and layout assistance. John Blake of the Department of Education's Research Library was extremely helpful in locating numerous articles.

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I. General Description (Data Sets/Populations)

1

Burkheimer, Graham J., and Novak, Thomas P. 1981. A Capsule Description of Young Adults Seven and One-Half Years After High School. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 208 794

This study uses NLS-72 data to examine the vocational activities, plans, aspirations, and attitudes of NLS participants after leaving high school along with the relationship of these activities to past educational experiences and background characteristics. Data were drawn from the base year through 1979 follow-up surveys. Postsecondary education, work, marital status, home ownership and life goals are among the categories explored.

2

Eagle, Eva, and others. 1988. A Descriptive Summary of 1972 High School Seniors: Fourteen Years Later. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 299 913

This report provides detailed information on the activities of 1972 seniors between their high school graduation and February 1986. Data from the NLS-72 are used to look at educational attainment, work and marriage history, attitudes, and civic participation. Differences and patterns of change for several subgroups (including race-ethnicity, gender and socioeconomic status) are examined.

The first chapter examines the educational progression of 1972 seniors through 1986, with an emphasis on degree attainment. The second chapter focuses on labor force participation between 1979 and 1986 and describes patterns of employment for members of the 1972 senior cohort. The third chapter analyzes change since 1972 in student attitudes, registration and voting, and memberships in voluntary organizations by demographic characteristics and educational attainment.

Major findings include:

(1) Sixty-six percent of the 1972 high school seniors enrolled in some form of postsecondary education by 1986, with most enrolling immediately after high school graduation.

(2) In 1986, 44 percent of 1972 high school seniors still expected to continue their education.

(3) Differences in employment patterns existed between men and women but were not strongly associated with race-ethnicity.

(4) Women from this cohort were more likely than men from this cohort to have been parents by 1986.

(5) Substantial proportions of the 1972 seniors agreed that there are serious problems facing elementary and secondary schools.

3

Fetters, William B., and others. 1984. High School Seniors: A Comparative Study of the Classes of 1972 and 1980. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 248 277

This report uses "Base Year" survey data from the NLS-72 and High School and Beyond "Base Year" cohorts to examine differences in school experiences, school performance, student self-perception and values, and plans and aspirations. The second chapter of the report compares the two classes with regards to school experiences (e.g., curricula, courses, extracurricular activities) and students' evaluation of their school and the education they received. Differences in course grades, homework effort, and standardized cognitive test scores are examined in the third chapter. The fourth chapter looks at differences in values, self-concepts, and the extent to which students believe they have control over their own fate. The fifth and final

chapter looks at trends in short- and long-range educational and occupational plans.

Findings show a decline in the percentage of students enrolled in an academic curriculum and a sharp increase in the number of seniors who thought schools should place more emphasis on basic academic subjects. 1980 seniors rated their schools higher than the 1972 seniors with regard to library facilities, teacher interest, and guidance counseling. Declines were seen in both verbal and mathematics scores as well as in the amount of time spent on homework. Despite this, there was an increase in grade point averages by .07 of a letter grade.

4

Larsen, Amy S., Watson, Mark E., Duncan, Debra P., Riccobono, John A., and Burkheimer, Graham J. 1981. Tabular Summary of the "Fourth Follow-Up" Questionnaire Data. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

This report contains tabular summaries of the numerical responses to the "Fourth Follow-Up" Questionnaire items of 18,630 individuals. These items deal primarily with the survey participants' educational experiences and occupational attainments in October 1977, 1978, and 1979, along with their continuing or revised plans about education, training, and jobs, as well as measures of their aspirations, attitudes, and opinions.

The panel of repeated observations will permit the examination of the relationship between schooling, work, and other experiences and subsequent career choices as well as educational and labor force participation of each of the selected individuals. Such information and the resultant analyses are important to those engaged in formulating legislative proposals and educational policy. (From article summary)

5

Lenth, Charles S., and Christal, Melodie E. 1991. "National Data Bases and Statistical Resources on Higher Education: An Annotated Guide." New Directions for Institutional Research (Charles S. Lenth ed.) 69: 83-107.

The authors provide a guide to major sources of higher education data. More than 50 national, periodic, and publicly available sources, including the NLS-72, are described.

6

McAdams, Kathy, and others. 1981. National Longitudinal Study of the High School Class of 1972: An Historical Overview and Summary. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 217 051

This report is a brief history of the NLS, along with its origins and goals. In addition to the design and content of the sample, the summary also covers the NLS questionnaire design through the fourth instrument, the administration of the pretests, "Base Year" and "Follow-Up" surveys, data preparation and quality, and the use of data by federal agencies, social scientists and others. Materials extracted from key NLS documents are provided. Tables illustrate statistical and variables data, and the appendices include complete survey instruments with an NLS bibliography. (Adapted from ERIC abstract)

7

Riccobono, John A., ed., and others. 1981. National Longitudinal Study of the High School Class of 1972: "Fourth Follow-Up" Survey. Final Methodological Report. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 217 052

The report of the "Fourth Follow-Up" survey (1979) of the NLS-72 is methodological, historical and descriptive in nature, but contains no analytical results. Reference to earlier reports is provided in determining postsecondary educational and vocational activities of young adults in transition years. The six sections present the background and purpose of the NLS, an overview of operations, the development of the "Fourth Follow-Up" instruments, related materials, and linkages between the fourth and prior "Follow-Up" questionnaire items. Data tables illustrate the text. (Adapted from ERIC abstract)

8

Riccobono, John A., and others. 1980. "The NLS Data Base: From "Base Year" 1972 to "Fourth

Follow-Up" 1980." Paper presented at the Annual Conference of the NCARE, Wake Forest University, November 13-14. ED 195 590

A brief description of the survey design of the NLS-72 and a listing of the kinds of research conducted using the NLS-72 are included in this report. Topics of research include access to higher education, persistence and performance in higher education, financial aid, progress in postsecondary education, vocational education, occupational choice, psychological development, secondary school effects, consumer and political behavior, minority students, and research methodology.

9

Taylor, Mary Ellen, and others. 1981. National Longitudinal Study of the High School Class of 1972 Study Reports Update: Review and Annotation. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 218 314

This document annotates and catalogues all of the NLS-based studies received from data users since the beginning of the study (1972) through 1981, summarizes their major findings and, where appropriate, makes comparisons among those findings.

II. Methodology

1. Data File User's Manuals

10

Henderson, Louise, and Levinsohn, Jay. 1981. National Longitudinal Study of the High School Class of 1972. School File Documentation. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 313 401 (See also ED 313 402)

This documentation is intended to assist users of the school file which was prepared from information collected for the NLS-72. The school file is a companion to the NLS-72 student-based data file and consists of 1,318 records, one from each high school from which NLS-72 students are sampled. It contains information about the environment, staff, procedures, facilities, and curricula of the sample high schools. This documentation describes the sample design of the survey and is supplemented by appendices containing detailed information about the variables. Appendix A contains the data collection instruments: the School Questionnaire and the Counselor Questionnaires. Appendix B is a summary listing of the 504 variables in the file. The listing provides, for each variable, the variable number and label, the corresponding question label, the position in the data file, and the corresponding question label. Appendix C is a listing of the frequencies of the responses to each question. (ERIC abstract)

11

Jones, Calvin, and others. 1986. National Longitudinal Study of the High School Class of 1972. Postsecondary Education Transcript Study Data File User's Manual. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 313 399, ED 274 713

This is the original code book for the Postsecondary Education Transcript Sample File (PETS) NLS-72. It describes the machine-readable data file containing information on transcripts from NLS-72 senior cohort members who reported attending a postsecondary institution after high school. These transcripts were collected in 1984. Information de-

rivable from the file includes: (1) major and minor fields of study; (2) periods of enrollment; (3) courses taken; (4) credits earned; and (5) grades received and credentials earned at 2-year, 4-year and other types of postsecondary institutions. Data are organized at the student, transcript, term, and course levels. This user's manual documents the procedures used to collect this information and provides researchers with technical guidance for using the public release data files. Data editing procedures are discussed, and the organization and content of the files are described. Procedures used to construct sampling weights for use in computing population estimates are reviewed. Lists of the endorsing institutions, postsecondary school codes in numerical order, postsecondary school codes in alphabetical order, and course subject codes in numerical order are provided. The data file record layout and raw frequency distributions are tabulated. (Adapted from ERIC abstract)

12

Kolstad, Andrew. 1987. National Longitudinal Study of the High School Class of 1972 NLS-72 DMDC Military Records Data File User's Manual. Washington, DC: U.S. Department of Education, Center for Education Statistics.

The purpose of this user's manual is to provide the information needed to use the Defense Manpower Data Center (DMDC) military records data file in conjunction with survey data from the NLS-72. The NLS-72/DMDC military records data file contains information about the military careers of about 1750 men in the NLS-72 sample who enlisted in the military. The information contained in this data file includes both measures recorded at the time of enlistment (such as entry pay grade, Armed Forces Qualifying Test (AFQT) score, demographic measures, and educational attainment) and measures that change during the enlistee's military career (such as current pay grade, military occupation, and re-enlistment or separation status). When linked, the result is a unique analysis file that combines the best features of both data sources, making possible analyses of both pre-service and post-service ca-

recs of young men—information that is not available from military records alone. (From article introduction)

13

Knepper, Paula. 1987. Addendum to NLS-72 Postsecondary Education Transcript File. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

This addendum contains information on changes and corrections to the original NLS-72 transcript files. Most problems dealt with credit counts when BA degrees had been awarded. Problems included duplicate information, incorrect transfer indicators, incorrect term type, inaccurate information on institution type, difficulties converting/standardizing credit unit measures, missing dates, and standardizing grades. Instructions for certain variables, as well as examples of SAS programming to assist users in accessing, merging, and using the NLS-72 PETS files are also included.

14

Adelman, Clifford. 1992. Supplementary Addendum: NLS-72 Postsecondary Transcript Files. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

This addendum explains the purpose and results of a second cleaning and revision of the NLS-72 PETS data. The results of these efforts were four datasets with the SAS extensions STUDENT3, TRANS4, TERM4, and COURSE4. While not official NCES datasets, these are recognized as the definitive PETS files.

The files include a recoding of the COURSE file according to a revised taxonomy, corrected inaccuracies in the "major" designated on transcripts, revisions in term dates, adjusted credit equivalencies, further elimination of duplicate transcripts, and corrections of other difficult-to-detect problems in the original coding (e.g., students with BA degrees awarded by community colleges). New variables and flags were added to the TRANS file to indicate institutional Carnegie type, historically black colleges, etc.

15

Riccobono, John, Henderson, Louise B., Burkheimer, Graham J., Place, Carol, and Levinsohn, Jay R. 1981. National Longitudinal Study: "Base Year" (1972) through "Fourth Follow-Up" (1979) Data File User's Manual Volumes I, II, and III. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

These three volumes are to be used as a guidebook to facilitate use of data files prepared from information collected, processed, and systematically stored during the course of the NLS-72. The volumes are divided into several sections. The first provides users with a general understanding of the file. Part 2 provides the methodological background of sampling, weighting, and data collection as well as brief descriptions of the study data collection instruments. Part 3 indicates the procedures of file preparation, including data editing/coding, entry operations and development of data quality indices and composites. Part 4 overviews the contents and organization of the data file, and describes important blocks of data. Part 5 provides technical specifications for the data file and defines some potential processing problems. (Adapted from Introduction)

16

Tourangeau, Roger, and others. 1987. The National Longitudinal Study of the High School Class of 1972 (NLS-72) "Fifth Follow-Up" (1986) Data File User's Manual. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 292 890

This manual was produced to familiarize data users with the procedures followed in data collection and processing of the "Fifth Follow-Up" survey (1986) of the NLS-72 and to provide documentation for use of the public release data tapes. The manual refers to each item of data by its Statistical Analysis System (SAS) variable name as defined in the SAS and SPSS-X (Statistical Programs for the Social Sciences) control cards provided in the data file. Appendices include the survey questionnaire, codes used in the data collection, and the data layout. (Adapted from ERIC abstract)

Sebring, Penny, and others. 1987. The National Longitudinal Study of the High School Class of 1972 (NLS-72). "Fifth Follow-Up" (1986). Teaching Supplement. Data File User's Manual. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 292 891

As part of NLS-72, a Teaching Supplement mail questionnaire was sent to all respondents to the "Fifth Follow-Up" survey who indicated they had a teaching background or that they trained to become teachers (N=1,517). The instrument focused on the qualifications, experiences and attitudes of current and former elementary and secondary teachers and qualifications of persons who had completed a degree in education or certification but had not taught. This manual familiarizes data users and others with procedures followed for data collection and processing of the supplement, and provides necessary documentation for use of the Teaching Supplement data. The data gathered can be used to investigate issues related to teacher quality and retention such as: (1) ways to attract potential teachers to the profession; (2) how to match teachers' assignments with their academic training; (3) the level of teacher satisfaction with their working conditions and jobs; and (4) the principal incentives and disincentives for teachers remaining in the profession. The appendices include the questionnaire and the data layout. The last segment of the manual is the codebook for the Teaching Supplement data. (Adapted from ERIC abstract)

See Teachers

2. Data Collection Procedures

18

Henderson, Louise B., and Allen, Danny R. 1981. NLS Data Entry Quality Control: The "Fourth Follow-Up" Survey. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 221 593

The data entry quality control procedures in discrete data entry tasks of the NLS-72 "Fourth Follow-Up" Survey are examined. Direct data entry

terminals were used to key survey questionnaire item responses, telephone interview corrections, respondent background information and supplemental questionnaire responses into computer disk storage. Data entry error rates were computed on the survey questionnaires on the basis of three keyings: selection of a random sample from each batch after the initial keying of the data, and selected questionnaires rekeyed by two additional operators. In the implementation described, the overall error rate tolerance established for the NLS survey was not exceeded. The variable error rate over samples and operators on the selected supplemental questionnaires was 0.00040; estimated character error rate was 0.00023. The telephone interview additions and corrections, and directory information entry procedures are described. (Adapted from ERIC abstract)

19

Wisnaker, Joseph M. 1981. Factors Associated with Edit Failure. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 216 040

The NLS-72 employed a combination of mail, telephone, and personal interview data-gathering techniques. The NLS quality control process involved editing each returned questionnaire to determine if certain key items were answered and if responses were consistent. If the respondent failed to answer these key items properly, the questionnaire failed edit and the respondent was contacted by telephone. The purpose of this study was to determine why so many NLS questionnaires failed edit (over 60 percent of the "Third Follow-Up" survey of 1976). The study concluded that: (1) though subgroup differences were found, their magnitude is too small to be the basis for concrete recommendations for survey practice; (2) the majority of edit failure problems associated with itemized financial questions revolved around the respondents' failure to supply answers to each of the requested line items; (3) items structured as "check all responses that apply" are likely to be failed by a substantial number of respondents; (4) reflexive items have a realizable potential for reducing respondent burden where repetitive information is required; and (5) overall data entry errors were low

except for items requiring itemized financial information. (Adapted from ERIC abstract)

20

Wisembaker, Joseph M., and Kolstad, Andrew J. 1981. Factors Related to "Third Follow-Up" Survey Responses. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 216 036

The "Third (1976) Follow-Up" survey of the NLS-72 found that there is little difference in group variability in survey response when considering background characteristics, while significant differences in response rates are found when considering the group patterns of response to prior instruments. Prior response was determined to be the most important predictor of "Third Follow-Up" response. The scope and purpose and descriptive statistics are presented analyzing response rates, response modes and their quality. The prediction approaches and results of the variables, a discriminate function analysis of mail and personal interview modes, and the quality of data are discussed, referring to the importance of a response payment incentive procedure. The study was meant to facilitate future data collection efforts. Appendices and tables illustrate the analysis. (Adapted from ERIC abstract)

3. Analysis Strategies

21

Eckland, Bruce K., Henderson, Louise B., Tickamyer, Anne R., and Trent, William. 1981. Constructed Education Variables. Washington, DC: Department of Health, Education, and Welfare, National Center for Education Statistics.

The purpose of this report is to define four basic research variables related to the educational progress of the following students: (a) all undergraduate enrollees in academic college programs for each year between October 1972 and 1976, (b) college graduates in October 1976, (c) postgraduate students in October 1976, and (d) earned credit hours as of October 1976. The definition of these variables appears to be fairly straightforward, but construction is complex.

Given the considerable effort and costs involved in resolving the measurement problems in these cases, along with the importance of the variables for analytical purposes, the authors strongly recommend that they be added to the NLS master file either as described in this report or in some modified form. (Adapted from article abstract)

22

Pavel, D. Michael, and Reiser, Mark. 1991. "Using National Data Bases to Examine Minority Student Success in Higher Education." New Directions for Institutional Research (Charles S. Lenth ed.) 69: 5-20.

This article discusses using national databases to examine access and achievement of racial and ethnic minority students in higher education. The article specifically looks at longitudinal databases such as the NLS-72, High School and Beyond, and NELS:88 and at time-lag cross-sectional surveys of postsecondary institutions such as IPEDS and HEGIS.

23

Peng, Samuel S., and Jaffe, Jay. 1980. "Third Follow-Up" Survey Composite Variables. Washington, DC: Department of Health, Education and Welfare, National Center for Education Statistics.

The composition and statistical characteristics of 14 composite variables from the NLS-72 are described in this report. The composites derived stem from the seven general areas from the NLS-72: satisfaction with education and training, satisfaction with work, voluntary participation or "activism," consumerism, perceived quality of life, political participation, and factors in choosing graduate school. With few exceptions, the composite variables produced reliability and discriminant validity favorable to their use in social science and education research. (Adapted from article summary)

24

Shah, Babubhai V., and others. 1981. "Inferences About Regression Models." Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 216 044

Aside from the theoretical issues involving the validity of inferences from surveys, the basic problem of producing unbiased estimates of regression parameters and estimates of the associated standard errors has been a particularly difficult issue in dealing with results from stratified multistage sample designs such as the one used in the NLS-72. The purpose of this report is to review some appropriate available techniques that may be useful in applying regression models to the NLS-72 data. The first section provides a framework for evaluation and an appraisal of some alternate approaches within this framework. A preferred approach (combining the Horvitz-Thompson estimator and Taylorized deviation) is compared to the Ordinary Least Squares approach through a simulation procedure using actual NLS data. The several results are summarized. Formulae underlying the preferred approach are provided separately in Appendixes A and B, and details of the development and use of a computer program to implement the approach are provided in Appendixes C and D. (ERIC abstract)

25

Wolfe, Lee M. 1980. Path Analysis with Categorical Data: Applications to Education. Blacksburg, VA: Virginia Polytechnic Institute and State University. ED 189 155

This study uses withdrawal from higher education to illustrate an educational application of path analysis with categorical data. The data are drawn from the NLS-72 and the sample includes those who attended 2-year or 4-year colleges in the fall of 1972. Dropouts are defined as those students who reported themselves as not attending school, not graduating and not reentering school by the time of the 1976 "Follow-Up" survey. Results indicate that withdrawal from higher education depends on the additive effects of ability and grades. Race is not a factor in the decision to withdraw.

4. Measurement Property

26

Patterson, Barbara J., and Wolfe, Lee M. 1981. "Specification Bias in Causal Models with Fallible

Indicators." Paper presented at the Annual Meeting of the American Educational Research Association, Los Angeles, CA, April 13-17.

In the bivariate case, measurement error in the independent variable produces an attenuated estimate of the true regression coefficient. In the multivariate case, the bias which results from specifying, incorrectly, a model with no measurement error will produce biased estimates which are predictable in neither their direction nor magnitude. Using data on educational attainment from the NLS-72, this paper examines the extent of bias inherent in ordinary least squares regression estimates when the presence of measurement error is ignored. In some cases, the nature of the bias can be predicted, but the more usual situation is that measurement error bias is unpredictable. (ERIC abstract)

27

Richards, James M. 1983. "Validity of Locus of Control and Self-Esteem Measures in a National Longitudinal Study." Educational and Psychological Measurement 43(3): 897-905.

The author studied relationships among locus of control and self-esteem relative to selected personal goals (educational aspiration, career goals, marriage and anticipated number of children). Evidence regarding the validity of the locus of control and self-esteem measures relative to the goal attainment of the above areas was also obtained using the "Base Year" and "1976 Follow-Up" of NLS-72.

Results indicate no meaningful pattern between internal control and positive self-esteem, and goal attainment. Because locus of control and self-esteem are more strongly related to differential goal attainment, the validity of the NLS-72 measures of locus of control and self-esteem are questioned.

28

Wolfe, Lee M., and Robertshaw, Dianne. 1983. "Racial Differences in Measurement Error in Educational Achievement Models." Journal of Educational Measurement 20(1): 39-49. (See also ED 219 429)

Using data from NLS-72, the authors explore measurement error differences between black and white students. Various statistical tests are used to examine differences between blacks and whites in models of educational attainment and reported parental status.

These tests "indicate that both blacks and whites relate their reports of parental status to the latent true score with unit slopes. That is, a one-unit increase in true status leads, on average, to a one-unit increase in reported status. However, whites in general report these measures with less relative error than do blacks; as a result, the reliability of measurement is greater for whites than for blacks. Finally, these results suggest but do not prove that comparisons between blacks and whites on models of educational achievement are suspect if they are based solely on least-square estimates. Such estimates are biased by the presence of measurement error; because the extent of measurement error varies by race, interracial comparisons of least-squares structural parameter estimates may be biased."

29

Wofle, Lee M., and Robertshaw, Dianne. 1981. "Latent Causal Structures in Panel Surveys." Paper presented at the Annual Meeting of the American Educational Research Association, Los Angeles, CA, April 13-17. ED 205 555

Since measurement errors exist in panel surveys, LISREL (a procedure for controlling measurement error by the analysis of covariance structures) was used in this investigation to determine the stability of the social psychological concept of locus of control expectancy change with the acquisition of postsecondary education. A subset of the NLS-72 data for 8,650 white males was used for this study. The measures of the locus of control, based on Rotter's Scale, were used twice, once in the students' senior year and again 4 years later. The variables of ability and socioeconomic status were also incorporated into the study. Apparently the acquisition of further education beyond high school does not substantially increase one's internal control expectancies. (ERIC abstract)

5. Nonresponse Bias

30

Jones, Calvin, and others. 1985. National Longitudinal Study of the High School Class of 1972 "Fifth Follow-Up" Survey and High School and Beyond "Third Follow-Up" Survey. Field Test Report. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 269 465

The combined field tests for the "Third Follow-Up" survey of High School and Beyond (HS&B) and the "Fifth Follow-Up" survey of the NLS-72 were conducted during the spring of 1985. The overall purposes of the field tests were to evaluate questionnaires and procedures to be used for the full-scale surveys scheduled for 1986. Both the NLS-72 and the HS&B questionnaires were reviewed for item nonresponse for all items with 4 percent or more missing data. Both questionnaires included a large number of skip patterns. Empirical results concerning response rates to skip patterns were discussed and special problems requiring revision were analyzed. A calendar format was tested to offer an effective way of capturing periods of interrupted schooling and employment, reducing the size of the main survey data file without compromising data quality. The effectiveness of new and revised HS&B and NLS-72 items were evaluated by frequency distributions and evaluators' observations. The current "Follow-Up" surveys of HS&B and NLS-72 field tests were done by telephone. In addition, a separate questionnaire, the Teaching Supplement, was developed for a subset of the NLS-72 sample. (ERIC abstract)

6. Sample Design and Effects

31

Adelman, Clifford. 1990. "The Data Game: Success Depends on How—and About Whom—you Ask the Question." Change (May/June): 44-45.

This article discusses the implications and the "riskiness" of using different types of national

datasets (cross-sectional versus longitudinal). The author also discusses the advantages of using NLS-72 and the Postsecondary Transcript Sample (PETS), and demonstrates that answers to questions such as college completion rates and time-to-degree depend on who one counts in the universe.

32

Benrud, C.H., and Williams, R.L. 1981. Development of Adjusted School Weights for the National Longitudinal Survey of the High School Class of 1972. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 216 041

The major emphasis of the NLS-72 has been directed toward individuals in the 1972 graduating

class. Consequently, sampling parameters were established to ensure student representation, and the bulk of data collected were individual-level data. School-level data exist on a separately documented database, and weights appropriate for analyzing these data have been computed. The purpose of this report is to define the post-stratification adjustment procedure used to develop appropriate school-level weights, given an initial school selection procedure designed to provide student representation. This report describes the NLS-72 school sample design, computation of unadjusted student weights (used in determining weights for individual high school seniors), and computation of adjusted weights for school-level analysis. (ERIC abstract)

III. Work

1. Labor Force Participation

33

Black, Matthew. 1980. An Analysis of Youth Job Search and Geographic Mobility. Princeton, NJ: Mathematica Policy Research.

NLS-72 base year through 1976 follow-up surveys and the 1970 Census of the Population and Housing 5th Count Summary tape were used to examine the job search methods of recent high school graduates, their relocation to a new area, and how relocation and changes in employment affect successful attainment of career goals. Results of the study were intended to help policymakers reduce youth unemployment and improve the quality of employment. The study also examined the role of the education system in the school-to-work transition. The study included general background information on graduates, education policy issues, a review of the literature, determinants and implications of migration and job search activity, theoretical and probability models of migration and information on different job search methods.

Findings indicated that recent high school graduates were responsive to labor market signals (such as availability of jobs) and behaved accordingly. There appears to be no racial or gender difference in migration behavior. Several factors, such as SES, fewer number of years at high school location, recent moves, marriage (for females only), employment experience and labor force status in the recent past, and verbal and mathematical aptitude had a positive influence on migration. Migration tended to enhance employment prospects for those who were initially unemployed, especially students. For those looking for employment, using placement agencies or union registration was more beneficial than using informal search methods such as friends.

See School-to-Work Transition

2. Training

34

Alsalam, Nabeel, and Stacey, Nevzer. 1989. Employer Training of Work-Bound Youth: An Historical Review and New Results. Background Paper No. 43. Washington, DC: U.S. Department of Labor, Commission on Workforce Quality and Labor Market Efficiency. ED 317 712

This paper describes work-bound youth by looking at their history of training, the providers of training, and training's effects on salary. A sample from NLS-72 was used to look at the education, training and employment experiences of the cohort from 1972-1986. Those with no postsecondary education involvement comprised the work-bound sample.

Some main findings of the study were that those who received more formal education (both degree and nondegree postsecondary education participants) also received more training. Those work-bound youth who received more training got higher salaries than their peers with less training. Although women and men were equally likely to say they received training, women actually spent less time in training.

35

Altonji, Joseph G., and Spletzer, James R. 1991. "Worker Characteristics, Job Characteristics, and the Receipt of On-The-Job Training." Industrial and Labor Relations Review 45(1): 58-75.

This study uses a subsample of 3,181 respondents of the NLS-72 to examine the influence of worker characteristics and training on employment. The article abstract is as follows:

The authors examined the relationship between the receipt of employer-provided training and

the characteristics of workers and jobs. They found that the intensity of training and the duration of training were negatively related; the incidence of training was slightly higher among women than among men, but the amount of training was higher among men; blacks received somewhat more training than whites; postsecondary education had a strong positive relationship with training; and aptitude had a positive effect on training. Training does not appear to have been affected by high school curriculum or by observable and unobservable factors specific to the individual's high school.

The findings of the study imply "that geographic mobility can be viewed as a productive undertaking for promoting upward mobility once a young person has successfully entered the labor force and gained employment."

36

Cook, Robert, and others. 1989. Analysis of Apprenticeship Training from the National Longitudinal Study of the High School Class of 1972. Washington, DC: U.S. Department of Labor, Bureau of Apprenticeship and Training; International Union of Operating Engineers. ED 306 454

This study examined the effects of on-the-job or "hands-on" vocational training relative to standard classroom vocational instruction on subsequent employment, earnings, wages, and job satisfaction. The data were drawn from the NLS-72 base year through fifth follow-up surveys. The study was carried out in stages. The first stage used the base year through fourth follow-up surveys and the second added the "Fifth Follow-Up" survey.

Findings indicated that apprentices earned more than those in the comparison group, both in terms of hourly wage and family income. Apprentices tended to come from families of medium or high SES. More apprentices received vocational education, while the comparison group received more general academic instruction. The distribution of grades between the two groups, however, was remarkably similar. Union membership was higher for apprentices during the period between high school graduation and 1979. The labor force partici-

pation of apprentices was also higher than the comparison group.

37

Zemsky, Robert, and others. 1982. Training's Benchmarks. A Statistical Sketch of Employer-Provided Training and Education: 1969-1981. Task I Report: The Impact of Public Policy on Education and Training in the Private Sector. Philadelphia, PA: University of Pennsylvania. ED 265 379

This document, comprised of five separate reports, presents a set of statistical benchmarks for gauging the growth and development of corporate training and education over the last decade. "Company Training, Employment Stability and Employers' Needs and Practices" (Ivar Berg and Janice Shack-Marquez) uses three national surveys—the Panel Study of Income Dynamics, the new National Longitudinal Survey of Youths, and the NLS-72—to examine company training programs. The first part of this report focuses on the implications that receiving training from the company has on respondents' employment experiences. The second part, which uses surveys from three Michigan counties, looks at the relationship between firms' characteristics and the human resources needs employers profess to have.

Findings indicate that, in these national samples, workers do not appear to be in jobs requiring much training or have employers who feel their employees do not need much additional training.

3. School-to-Work Transition

38

Bishop, John, Blakemore, Arthur, and Low, Stuart. 1985. High School Graduates in the Labor Market: A Comparison of the Class of 1972 and 1980. Columbus, OH: Ohio State University, National Center for Research in Vocational Education. ED 268 328

This study identified characteristics of high school experience that were related to initial success

or failure in the labor market. The authors hypothesize that poor school-to-work transition was a result of poor educational preparation. Students who were not enrolled full-time in higher education or were not serving in the military are included in the sample. Part-time postsecondary students are also included. Data were taken from the "Base Year" and 1982 surveys of the HS&B 1980 cohort and the "Base Year" and "First Follow-Up" of the NLS-72.

In general, having a job during high school, taking more vocational courses, and having parents with high income had significant, positive effects on entry wages. High school job (with the exception of NLS-72 females and HS&B males), higher GPA (for NLS-72 males and HS&B females), greater number of semesters of vocational courses (with the exception of NLS-72 males), and higher parental income had significant positive impact on annual earnings. Region also appears to have a significant impact on annual earnings, but a consistent pattern does not exist. (Article summary)

39

Black, Matthew. 1980. An Analysis of Youth Job Search and Geographic Mobility. Princeton, NJ: Mathematica Policy Research. ED 219 497

For description see entry #33.

See Labor Force Participation

40

Campbell, Paul B., and Basinger, Karen S. 1985. Economic and Noneconomic Effects of Alternative Transitions Through School to Work. Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education. ED 254 638

The study compared the economic and non-economic effects of various combinations of high school curriculum and postsecondary school-to-work transition patterns. Data for the study were obtained from the NLS Youth. In some cases, the 1979 data from the high school class of 1972 database supplemented the NLS Youth data, and for

noneconomic outcomes, class of 1972 data were used exclusively. These data indicated that high school vocational education is associated with a clear wage advantage for vocational graduates in jobs related to their area of training. Postsecondary education also appeared to add to this advantage. Although vocational education brought an increase in labor force participation for white women, no significant relationship between vocational education and employment stability was found for other demographic groups. Noneconomic outcomes of participation in a high school vocational education program turned out to be more difficult to assess; however, the noneconomic benefits of participation in postsecondary education were clear. Those who achieved a postsecondary degree were more likely to register to vote and to accept as positive the current societal trend in broadening the role of women in the labor market. The earnings advantage of vocational education was most pronounced among white males and did not exist at all for minorities of either sex. The policy implications of these findings were examined. (ERIC abstract)

See Economics of Education

41

Campbell, Paul B., and others. 1984. Transition Patterns Between Education and Work. Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education. ED 240 272

This study investigated those transitional patterns that account for substantial numbers of young people moving from secondary education to employment. Data came from the NLS-72 and the National Longitudinal Survey of Labor Market Experience, Youth Cohort. Findings indicated that large numbers of students began postsecondary education but did not earn degrees. Often the interruption was followed by going to work. The availability of nearby community colleges led to higher attendance. Socioeconomic status, gender, and race were related to choice of pathway. Choices were also influenced by significant others, particularly parents and close friends. Few students cited high school

teachers and counselors as important influences. The choice of postsecondary education as a pathway was related to the high school experience; the higher the high school achievement, the higher the educational level the student generally completed. Outcomes of the nonpostsecondary path were predominantly lower skilled craft and service jobs. For vocational

students, postsecondary work tended to lead to professional/technical and craft occupations. On-the-job training was the predominant kind of postsecondary education. Post-high school training, incomplete pathways, and transitional decisionmaking were recommended for policy attention. (ERIC abstract)

IV. Secondary Education

1. School/Program Effects

42

Alexander, Karl L., and Pallas, Aaron M. 1983. "Private Schools and Public Policy: "New Evidence on Cognitive Achievement in Public and Private schools." Sociology of Education 56(October): 170-182.

Recent research by Coleman, Hoffer and Kilgore (High School Achievement: Public, Catholic and Private Schools Compared. New York: Basic Books. 1982) on the effectiveness of public and private schools may be seriously flawed because of its neglect of input-level differences in student performance in its reliance on cross-sectional testing data as the criterion measure. Using data from the High School and Beyond and the NLS Class of 1972 datasets, we examine public-Catholic sector differences within high school tracks for a variety of cognitive and achievement outcome measures. Even without any controls for sector differences in student characteristics, the public-Catholic differences are all very small. They account for less than 1 percent of the variance in both test scores and in years of school completed. When student selection and background characteristics are controlled, these small differences shrink even further. We thus cannot agree with Coleman, Hoffer, and Kilgore's claim that Catholic Schools produce better cognitive outcomes than do public schools. This claim is the first of the "factual premises" that they say would support policies to increase the role of private schools in American education. In our view, this premise is wrong, and hence should not be invoked in support of such policies. (Authors' summary).

43

Braddock, Jomills Henry II. 1990. Tracking: Implications for Student Race-Ethnic Subgroups. Report No. 1. Baltimore, MD: Center for Research on Effective Schooling for Disadvantaged Students. ED 325 600

This study uses HS&B, NLS-72, the National Survey of Middle School Principals, and the 1986

NAEP Young Adult Literacy Survey to depict the state of curriculum tracking and ability grouping in middle and high schools. Effects of tracking on African-Americans, Hispanics, American Indians, Asian-Americans, and white students are included. The NLS-72 is specifically used to examine the state of tracking as well as the extent of between class grouping and curriculum tracking.

Findings show tracking to have significant negative effects for African-Americans, Native Americans, and Hispanics. While tracking appears to positively influence Asian-Americans, the problems of educationally disadvantaged Asian-Americans may be masked. White students also appear to benefit from tracking and ability grouping, although significant numbers of them moved from the academic track to the general and vocational tracks between 1972 and 1982. The author feels that cooperative learning, flexible grouping, within-class grouping along with cooperative learning and the use of competency-based curriculum in multigrade groupings are better alternatives to tracking.

44

Datcher-Loury, Linda, and Loury, Glenn C. 1983. The Effects of School Quality on Earnings. Washington, DC: U.S. Department of Education, National Institute of Education. ED 267 083

The authors used a fixed effects model of the impact of individual high schools on adult earnings. This model improves on past models as it can control for selection bias resulting from correlation between school quality and student ability. Data are drawn from the NLS-72 base year through 1979 follow-up surveys and are restricted to a sample of out-of-school white males and females who lived in Chicago, Detroit, Los Angeles, New York, Philadelphia or San Francisco.

Findings reveal large and significant differences in earnings for otherwise identical individuals who attended different high schools. Results also suggest that this outcome is not necessarily the "spurious result of high ability or wealthier students

attending the better schools, but instead occurs because of other aspects of the school environment.”

See Economics of Education

45

Hilton, Thomas L. 1986. Changes in Student Achievement and Behaviors: A Cross-Sectional Analysis, 1972-1980. ED 274 670

This study uses data from the NLS-72 and HS&B to examine changes in seniors' achievement between 1972 and 1980. The school and student factors affecting changes are also examined along with policy implications of the results.

Findings show significant changes from 1972 to 1980 in student demographics; home and family characteristics; student behaviors and attitudes; and test scores. Some of these findings included an increase in mean level of parental education, fewer study aids in the homes of 1980 seniors, more seniors enrolled in general or vocational curriculum in 1980, a decline in time spent on homework between 1972-1980, and declines on all three achievement tests (math, vocabulary, and reading) and the SAT. The study's findings suggest a decreased focus on academics between 1972 and 1980.

46

Lindsay, Paul. 1984. "High School Size, Participation in Activities, and Young Adult Social Participation: Some Enduring Effects of Schooling." Educational Evaluation and Policy Analysis 6(1): 73-83.

1979 data from a sample of 8,952 respondents to the "Fourth Follow-Up" of the NLS-72 were used to evaluate a model of the effects of school size on participation in extracurricular activities and the effects of this participation on subsequent social participation in young adulthood.

Results support the hypothesis that greater participation in high school activities was related to greater participation in voluntary social activities when controlling for other influences. Also, students from smaller schools were more likely to participate in extracurricular activities, this effect being

stronger than those of individual background variables, curricular track and class rank. School size, however, did not have a statistically significant direct effect on young adult participation.

47

Lindsay, Paul. 1982. "The Effect of High School Size on School Participation, Satisfaction, and Attendance." Educational Evaluation and Policy Analysis 4(1): 57-65.

This study looks at the effects of school size on student participation, satisfaction and attendance at the secondary level. The author hypothesizes that these factors will be more significant in smaller schools. Four categories of activities are examined: athletics; drama, music and debating; journalism; and student government and political clubs. Student satisfaction is examined in terms of satisfaction with the quality of required courses and with the total school experience. Data are drawn from the "Base Year" survey of the NLS-72 and included participants who completed aptitude tests. Background variables are controlled for in the analysis.

Overall, the results support the hypothesis that extracurricular participation is higher at smaller schools. Satisfaction and attendance are also higher. In both cases, differences between school sizes are greater for women than for men.

48

Meyer, Robert, and Wise, David. 1982. "High School Preparation and Early Labor Force Experience." In The Youth Labor Market Problem: Its Nature, Causes, and Consequences, Richard B. Freeman and David Wise (eds). Chicago, IL: National Bureau of Economic Research.

This study assesses the impact of academic education, vocational training, or work experience during high school on labor market outcomes (such as annual weeks worked and wage rates). Data are drawn from the NLS-72 "Base Year" through "1976 Follow-Up" surveys.

Findings indicate a significant relationship between greater number of hours worked during high school and number of weeks worked a year after

graduation. Those who worked more in high school also received higher hourly wage rates. Job training in high school was not significantly related to wage rates or employment after graduation. On-the-job training initially does not affect wage rates but yields significant effects by the "1976 Follow-Up." (Article summary)

49

Miller, Jon D. 1985. "Effective Participation: A Standard for Social Science Education." Paper presented at the Annual Meeting of the Social Science Education Consortium, Racine, WI, June 5-7. ED 265 083

The study examines the effects of social studies courses on subsequent participation in political activities for blacks and whites. NLS-72 (base year through fourth follow-up surveys) data are used to explore these effects for those who were not involved at all in political activity, those who voted but were not involved in any other political activity and for those who were involved in one or more political activity other than voting. Level of participation in extracurricular activities, high school program, and SES are included in the model.

Findings indicate, in general, no direct relationship between social studies courses and participation in political activities. Level of participation in extracurricular activities, enrollment in an academic high school program, and high SES were more influential. In terms of racial differences, minority students were much more likely either to be not active or to participate in political activities other than voting. Nonminorities were more likely to vote but not participate in other activities.

50

Navaratnam, K.K., and Oliver, J. Dale. 1990. "A Comparison of 1972 and 1980 Secondary Agricultural Education Students." *Journal of Agricultural Education* 31(3): 54-58.

This study compares senior secondary agricultural education classes of 1972 and 1980 using a sample of 373 students from the NLS-72 "Base Year" survey and 390 students from the High School

and Beyond "Base Year" survey. Three specific issues examined are:

(1) The changes in student background characteristics such as race, sex and SES.

(2) The changes in academic ability of students. (Academic ability is determined by achievement tests administered as part of both NLS and HS&B).

(3) The post high school plans of agricultural education students.

Results show that the number of female agricultural education students doubled between 1972 and 1980. Results also indicate a 21 percent increase in Hispanic/Spanish agricultural education students and a 74 percent decrease among the American Indians and Alaska Native group. No changes in SES or academic ability were observed. Between 1972 and 1980 there was a 15 percent increase in the number of agricultural education students planning to go to a 4-year college, a 17.7 percent increase in the number of students planning to enter professional careers and an increase in those seniors planning to choose female-dominant jobs. Results of the study suggest that the equity movement has elevated enrollment of female and black students. Areas of concern, indicated by the findings, include the decline in enrollment of American Indians and Alaska Natives and the need to attract more females to male-dominant professions.

51

Navaratnam, K.K., and Asche, F. Marion. 1988. "A Cross-Sectional Analysis of College Preparatory Seniors of 1972 and 1980." *The High School Journal* (February/March): 127-134.

The objectives of this study are to analyze changes in demographic characteristics over time (including sex, race, religion and SES), to estimate the changes in measured student achievement, and to compare the school experiences, educational and occupational plans, aspirations, and postschool activities for both high school seniors of the class of 1972 and the seniors of the class of 1980. The authors feel that this type of analysis is necessary in

order to affect policy aimed at improving secondary education.

Using data from both the "Base Year" and "First Follow-Up" of the NLS-72 and High School and Beyond senior cohorts, the authors conducted a cross-sectional analysis comparing college preparatory/academic high school students. Findings indicate several changes in each variable category over the study period, although these changes were smaller than anticipated. Changes include an increase in the proportion of females and minorities in the college preparatory curriculum, modest changes in federal support for special programs for the handicapped, disadvantaged and limited-English-speaking students, and an increase in the number of college preparatory students with high SES. The authors suggest that increased participation in extracurricular activities and out-of-school work account for differences in tested academic performance and also that the rise in student grades may lend support to the "grade inflation" hypothesis.

52

Riordan, Cornelius. 1985. "Public and Catholic Schooling: The Effects of Gender Context Policy." American Journal of Education 85: 518-540.

This study examines the effects of single- and mixed-sex Catholic schools compared to mixed-sex public schools. The primary purpose of the comparison is to assess whether students at single-sex schools outperform those at mixed-sex schools. The data are taken from the NLS-72 "Base Year" and "1979 Follow-Up" and include the full number of respondents who were white, Catholic or public school students enrolled in college, general or business tracks. The variables used in the comparison are vocabulary, reading, and math achievement scores and the SAT verbal and math scores.

Findings indicate few differences between Catholic mixed-sex and public mixed-sex schools. The only steady difference between the two is that Catholic school males tend to perform better verbally than public school students. Results from other comparisons between mixed-sex schools are inconsistent, insignificant or favor public schools. Students in Catholic single-sex schools, however,

consistently score higher than public school students. The author concludes that, because of the small differences between the mixed-sex schools, the two types of Catholic schools should be differentiated when doing comparisons with public schools. He also suggests further exploration of why single-sex schools may outperform mixed-sex schools.

53

Schmidt, William H. 1981. The High School Curriculum: It Does Make a Difference. East Lansing, MI: Michigan State University. ED 213 093

The question examined in this paper is whether variability in the quantity of schooling students receive in different curricular areas is a contributor to observed differences in achievement, not only among students attending different high schools, but among students in the same high school. A conceptual framework enumerates the determinants of achievement, including school and community characteristics, student background, and quantity of schooling in the specific curricular areas of mathematics, English, foreign language, fine arts, social studies and science. The sample used was 9,195 high school seniors in 725 schools taken from the NLS-72. The results suggest that quantity of schooling has a positive effect on academic achievement. The more the achievement is school-related, the larger is the resulting effect of the quantity of schooling. This was especially true for mathematics. Quantity of schooling also had positive effects on achievement in science and English; less clear results were found in the areas of vocabulary and reading comprehension, although quantity of schooling did continue to have a positive effect on achievement. (ERIC abstract)

54

Stone, James R. 1984. "Economic Attainment of Secondary Marketing and Distributive Education Students." Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA, April 23-27. ED 242 934

By developing models of economic attainment using factors such as job status attainment, unemployment, and salary, the study examines the rela-

tionship between participation in secondary marketing and distributive education (MDE), and economic attainment after graduation. Two samples drawn from the NLS-72 data were used for the analysis, and consisted of 1,118 students who took a set amount of courses in MDE and another 3,500 employed in marketing-related jobs in 1979.

Results showed positive, significant relationships between MDE participation and cooperative education, and job status attainment. Other factors influencing job status attainment in marketing were sex, education attainments, GPA and the community size where the respondent attended high school. Educational attainment was the strongest predictor of job status attainment and sex was a strong negative predictor. MDE and cooperative education only explain a small portion, however, as 86 percent of the variance is explained by factors not included in the model.

55

Trent, William. 1981. Contrasts, Trends and Implications of Student Course Enrollments and Extracurricular Membership in Desegregated High Schools. Baltimore, MD: Johns Hopkins University Center for the Social Organization of Schools. ED 229 491

This paper examines academic program enrollments, course enrollments, and extracurricular memberships in racially and ethnically mixed high schools in order to determine the extent of participation by black and white students. The major issue is whether, in desegregated schools, black and white students are reseggregated through these mechanisms.

The study is based on data collected from 1,318 schools throughout the nation for the NLS-72. The study finds that white students in desegregated schools participate less in extracurricular activities and clubs than do white students in segregated schools, and that black male students in desegregated schools participate more. Both black male and black female students in desegregated schools participate more in athletics, drama, and music activi-

ties, but white students participate more in honorary clubs.

For academic program and course enrollments, the study finds that black students are less likely than whites to be enrolled in academic or college preparatory programs in segregated and desegregated schools. In desegregated schools, however, blacks and whites are about equally likely to be enrolled in most courses, but the use of tracking or ability grouping procedures significantly reduces the opportunities for cross-racial contact in those courses. (Article abstract)

56

Trent, William, and McPartland, James M. 1981. "Race Comparisons of Student Course Enrollments and Extracurricular Memberships in Segregated and Desegregated High Schools." Baltimore, MD: Johns Hopkins University Center for the Social Organization of Schools. ED 210 406

The purpose of the study was to examine the participation of black and white students in academic programs, courses, and extracurricular activities in racially and ethnically mixed high schools. The authors also looked at whether in-school segregation occurs within desegregated schools on the basis of those factors. Data are taken from NLS-72. Participation rates are examined by race and residence (north, south) for both segregated and desegregated schools. A comparison of participation of black and white students from the same school is also done to examine where opportunities for cross-racial contact exist as well as where patterns of over or underrepresentation occur.

Findings are similar to Trent (1981) (see entry #55). White students enrolled in desegregated schools tend to participate less in extracurriculars than their peers in segregated schools. Both black males and females participate more in desegregated schools, especially in athletics, music, and drama. Blacks and whites are equally likely to be enrolled in most courses in segregated schools. The existence of tracking, however, significantly hinders the opportunity for cross-racial contact.

57

Wiley, David E., and Harnischfeger, Annegret. 1980. Curricular Resource Allocation and Course Exposure in Secondary Schools. Chicago, IL: M-L Group for Policy Studies in Education. ED 218 301

Data from the NLS-72 "Base Year" survey, and from a school record form filled out by school officials describing course-taking information for the last 3 years of high school by curricular area for each student's academic record, are used to present the degree of exposure students received in various curricular areas.

Findings indicate large and varied differences in academic instruction across groups (ethnicity and gender). Also, pupils enrolled in nonvocational programs actually received more vocational instruction and resources. Females received more vocational instruction than males and black students received more vocational resources in academic programs than whites, but less in vocational or general curricula. A major factor influencing academic preparation for further education and employment was high school course track membership. "This study concluded profound track-induced barriers to postsecondary access are built up due to the strong variation in course exposure over tracks. This occurred regardless of the ultimate aspirations of the students." (Adapted from ERIC abstract)

See Vocational Technical and Vocational Educational

58

Wiley, David, E., and Harnischfeger, Annegret. 1980. High School Learning, Vocational Tracking, and What Then? Chicago, IL: M-L Group for Policy Studies in Education. ED 212 847

After analyzing those data from the base year through third follow-up surveys of the NLS-72 pertaining to vocational education, researchers arrived at a number of conclusions. Included among these were the following: (1) race, sex, and academic performance are key factors for selection of vocational education programs, with minority students,

poor achievers, and females being the most frequent enrollees in vocational education; (2) because vocational education funds are allocated by local enrollment and program costs rather than by program enrollment, vocational education resources and services are diffused far beyond those enrolled in vocational education; (3) those in vocational programs work 40 percent more than do those in non-vocational programs; (4) far fewer vocational-track students receive postsecondary schooling than do academic-track students; and (5) high school coursework and work hours related strongly to postsecondary work hours and wages. (ERIC abstract)

59

Wolfle, Lee M. 1987. "Enduring Cognitive Effects of Public and Private Schools." Educational Researcher 16: 5-11.

In response to several articles assessing the effectiveness of public and private schools, the author extends the debate about effects, specifically of single-sexed and mixed-sexed Catholic schools versus mixed-sex public schools. Using the NLS-72 "Base Year" and "Fourth Follow-Up" surveys, the long-term impact of Catholic schooling on math and vocabulary achievement are examined.

"Base Year" test battery, as well as the number of semesters of high school and college math, were used to assess math and vocabulary achievement. Results of the study indicate that short-term effects of Catholic schooling do not endure as no significant long-term changes in vocabulary achievement are seen. Also, compared with public school students, students attending Catholic school experience a decline in mathematics achievement over time.

The author suggests that limitations of the study include the lack of sufficient measures of developed ability prior to entering high school and the effects of placement of test scores in the model. If test scores, (used in this model as control variables) were placed prior to entry into either Catholic or public schools, the total impact of Catholic schooling on math would be negative and there would be no difference in vocabulary achievement between Catholic and public schools.

2. Student Characteristics

60

Hansen, David O., and Ross, Peggy J. 1980. "Education, Significant Others and Farm-Reared Adolescents." Paper presented at the Annual Meeting of the North Central Sociological Society, Akron, OH, May 1-3. ED 211 292

This study examined the role of significant others in the educational and occupational decisions of farm-reared youth. Specific questions addressed include:

(1) Compared to others, how important are educators in influencing the choice of high school curriculum?

(2) Compared to others, how important are educators in influencing post-high school plans?

(3) To what extent do educators influence the choice of post-high school career activities?

(4) What factors predict variations in the influence of educators and other significant others on curriculum choice and post-high school plans?

Results show that family and friends exerted more influence than teachers and guidance counselors over career choice. Educators, however, focused on encouraging educational plans and discouraged military service and employment. These results suggest that teachers and counselors do not 'cool-out' farm youths. Level of encouragement was related to SES, ability and gender, with those of high SES and ability more encouraged to attend college and girls believing that significant others had more influence over their choice of curriculum.

V. Postsecondary Education

1. Access

61

Alexander, Karl L., Pallas, Aaron M., and Holupka, Scott. 1987. "Consistency and Change in Educational Stratification: Recent Trends Regarding Social Background and College Access." *Social Stratification and Mobility* 6: 161-185.

After a 30- or so-year period of rapid growth, college enrollments and high school-to-college continuation rates have leveled off. The present chapter examines current conditions of postsecondary access in light of these developments. Enrollment patterns from the NLS-72 (base year through first follow-up surveys) and the HS&B 1980 senior cohorts (base year through first follow-up surveys) are compared to evaluate changes in racial-ethnic, socioeconomic, and gender constraints upon college attendance. Academic resource measures (i.e., test performance, high school grades, and high school curriculum) are also examined in order to assess the patterning and magnitude of such disparities when academic qualifications are equivalent.

Attendance among members of the more recent cohort is about 5 percent less than for the earlier group, but this overall average decline obscures patterns of improved and diminished opportunities. Attendance among women actually has increased some, with the largest gains being at the lower socioeconomic levels. In contrast, attendance among men has fallen off sharply, especially among low resources and low SES whites and blacks. As a result of these divergent trends, women now attend college at higher rates than men, which reverses a longstanding pattern of male advantage. Minority youth (i.e., blacks and Hispanics) also attend at higher rates than whites at all but the highest SES strata, and when academic resource differences are controlled, the minority advantage appears at all points of comparison. Socioeconomic differentials, however, are persistent, and reflect the characteristic disadvantage associated with low status origins. Finally, attendance has not declined among

youth with the highest academic qualifications, nor is there much evidence of ascriptive inequality among them. The implications of these results for our understanding of current conditions of educational stratification are discussed in the concluding section. (Article abstract)

62

Alexander, Karl L., and Holupka, Scott. 1987. "Social Background and Academic Determinants of 2-Year versus 4-Year College Attendance: Evidence from Two Cohorts a Decade Apart." *American Journal of Education* 95: 56-80.

This paper examines determinants of access to 2-year versus 4-year colleges among college-going youth. Using the NLS-72 and High School and Beyond "Base Year" and "First Follow-Ups," the authors evaluate changes in racial-ethnic, SES and gender constraints on enrollment patterns and how access to different college types is affected by student background characteristics and academic resource measures (test performance, high school grades and high school curriculum). Issues regarding the relationship between type of college attended and economic/social outcomes are also addressed.

The three main findings are:

(1) The effects of student background on access to 4-year schools are small. The SES differences found in the initial observation diminish greatly once correlated differences in academic credentials/qualifications are added to the analysis. Blacks had somewhat greater probability of attending 4-year colleges than whites, and Hispanics are overrepresented in 2-year schools.

(2) Comparisons between the 1972 cohort and the 1980 cohort indicate little falloff in opportunities to attend 4-year colleges.

(3) Evidence of pre-college preparation is a good predictor of access to 4-year colleges.

Gardner, John A. 1987. Transition from High School to Postsecondary Education: Analytical Studies. National Center for Research in Vocational Education. Columbus, OH: Ohio State University. (See also ED 280 370)

This study focuses on factors affecting access to postsecondary education. The major emphasis is on aspects of personal background and institutional policy that influence educational aspirations and enrollment in postsecondary education. The influences of family income and availability of financial aid on decisions to attend college, as well as methods used to finance postsecondary education are also examined. Data from the NLS-72 and High School and Beyond are used in the analysis.

Results provide information on educational expectations, rates of enrollment, institutional characteristics, programs selected, and methods of student financing. Information on policy implications and areas of further study is also included. Major findings include:

(1) Little change was evidenced between 1972 and 1980 in the overall level of education that high school seniors expected to attain.

(2) Higher academic achievers, students from high SES families, and students from families with higher incomes are more likely to aspire to at least the bachelor's degree, and less likely to expect only high school graduation.

(3) Those seniors who expected at least a bachelor's degree preferred to attend 4-year colleges rather than junior colleges. Blacks are much less likely than Hispanics and slightly less likely than whites of the same gender to expect only high school graduation.

(4) Rates of attendance or enrollment immediately following high school graduation have fallen over the last decade.

(5) Socioeconomic status has a stronger impact on attendance for whites or Hispanics of either gender than for blacks.

(6) Hispanics are more likely than blacks or whites to attend 2-year institutions.

(7) Scholarships, grants and loans are used more often by students of higher ability than by those of low ability.

(8) As expected, Pell grants, the most frequently used source of aid, are used more often by blacks, students from low-income families, and low academic aptitude students.

64

Levin, Bernard H., and Clowe, Darrel A. 1987. "Competition Between Community Colleges and Postsecondary Proprietary Schools: Reality or Myth?" Journal of Studies in Technical Careers 2(4): 317-324.

The study uses data from the NLS-72, a sample of 487 students attending public postsecondary institutions and a sample of 145 proprietary students from the overall sample of students stating they were in a vocational curriculum, to test the hypothesis that community colleges compete with postsecondary proprietary schools. The authors compare students on the basis of race, sex, socioeconomic status, parental influence and peer influence.

Findings show that proprietary school students were more likely than community college students to be white, female and middle class. Parental and peer influence appear to be the primary reason students attended proprietary schools. Data show, statistically and conceptually, significant differences between the two groups and therefore do not support the hypothesis that competition exists between the two types of institutions.

65

Manski, Charles F., and others. 1983. College Choice in America. Cambridge, MA: Harvard University Press.

The processes of choosing and being accepted by a college are analyzed based on data from the NLS-72. Econometric modeling and descriptive statistics are provided on: student behavior in selecting a college, choice of school/nonschool alternatives,

decisions by colleges concerning grant aid allocations, the enrollment effects of the Basic Educational Opportunity Grant Program, graduates' postsecondary school and early work experiences, and individual and family attributes that affect application and acceptance. The predictive validity of test scores and high school performance is also examined. Among the findings are: most high school graduates would be admitted to some 4-year colleges of average quality were they to apply; applicants do not necessarily prefer the highest quality school; high school class rank and Scholastic Aptitude Test (SAT) scores are equally important in college admissions; federal scholarship aid has had only a small effect on enrollments at 4-year colleges but a much stronger effect on attendance at 2-year colleges; and the attention paid to SAT scores in admissions is commensurate with the power of scores in predicting persistence to attain a college degree. (Adapted from ERIC abstract)

66

St. John, Edward P., and Noell, Jay. 1989. "The Effects of Student Financial Aid on Access to Higher Education: An Analysis of Progress with Special Consideration of Minority Enrollment." Research in Higher Education 30 (6): 563-581.

Using NLS-72 "Base Year" and "First Follow-Up" and High School and Beyond 1980 and 1982 cohorts, the report analyzes the effects of both aid offers and type of aid on enrollment decisions both by college applicants in general and minority students. The authors' model compares the influence of the type of aid package on enrollment decisions for different students.

Major findings include:

(1) All types of aid packages had a positive impact on enrollment decisions by college applicants in all three high school classes.

(2) All types of aid had positive influence on enrollment by minority students.

(3) Background effects, such as mother's education, academic track in high school, high grades and high postsecondary aspiration had a strong in-

fluence on college enrollment in all three classes. Findings also indicate gains in access to higher education between the 1970s and 1980s.

(4) Student aid appears to have a stronger impact on access for minority students than for whites, although all types of aid had a positive impact on the enrollment decisions by all three groups. The size of the affect of loans is less than that of grants/scholarships in 1980 and 1982.

See **Financial Aid**

67

Thomas, Gail E., and Braddock, Jonills Henry, II. 1981. Determining the College Destination of Black Students. Atlanta, GA: Southern Education Foundation. ED 215 031

Drawing from the NLS-72 base year through fourth follow-up surveys, the authors examined factors determining the college destination of black students. Additional information on college characteristics was taken from the Office for Civil Rights 1972 Survey data. Effects of several variables were examined in terms of enrollment at (1) 2-year versus 4-year colleges, (2) public versus private colleges, (3) predominantly black versus predominantly white colleges, and (4) highly selective versus less selective colleges.

Findings show that standardized test performance and high educational expectations were major predictors of attending a private college for all sex and regional groups. High school curriculum was an important predictor of enrollment for males and females from the South. The location of the colleges students attended was also related to the demographic characteristics of their high schools.

2. College/Program Effects

68

Anderson, Kristine L. 1986. "College Contexts, Student Integration, and Educational Attainment." Paper presented at the Annual Meeting of the Association for the Study of Higher Education, San Antonio, TX, February 20-23. ED 268 874

This study focuses on structural and organizational features of institutions in relation to student persistence. The analysis incorporates ideas from Tinto's theory (1975) and status attainment models, and looks at persistence in terms of the influences colleges have on social and academic integration, academic performance, goal commitment and educational attainment.

The sample of 2,700 males and 2,700 females consists of all NLS-72 respondents who entered college directly after high school and were in academic programs. Persistence was looked at in terms of academic/graduate institutions versus vocational sub-baccalaureate institutions, size and complexity, and gender.

Background variables all exhibited significant effects on such variables as quality of college attended, institutional size, and degree of integration. Academic skills and achievement goals had stronger effects than SES. They also had significant effects on experiences and achievement. Quality of the college chosen appears to increase goal commitment and attainment while SES and integration seem to lead to lower goal commitment.

Regarding college characteristics, the author highlights the importance of considering more than a single college dimension "since no one factor fit observed patterns in the data" or effected all students in the same way.

See Persistence

69

Anderson, Kristine L. 1984. Race Differences in the Effects of College Characteristics on Educational Attainment. Washington, DC: U.S. Department of Education, National Institute of Education. ED 256 249

The study examines patterns of attainment for black and white students attending a variety of institutions in the early 1970s. The sample is composed of 795 black and 6,581 nonblack respondents to the NLS-72. The author specifically looks at the following questions:

(1) Are there institutional characteristics that are particularly important in helping black students perform adequately, persist, and graduate from college?

(2) Are the performance, persistence, and graduation of black students particularly dependent on institutional characteristics?

(3) Are integration into college life, faculty support, and avoidance of conflicting roles more important for black students?

Findings show that high school, race, and academic preparation affect black students' college selection while SES and goals affect the decisions of white students. Black students who attended predominantly black institutions received higher grades and were more likely to persist to a second year and obtain a bachelor's degree when compared to blacks who attended predominately white schools. Findings also show that black students have higher attainment at cohesive, small, private, less vocational colleges with low SES composition.

See Gender and Racial-Ethnic Differences

70

Anderson, Kristine L. 1984. The Effect of College Type and Characteristics on Educational Attainment. Washington, DC: U.S. Department of Education, National Institute of Education. ED 256 206

The study examines the impact of institutional types and of their structural and compositional characteristics on a sample of students who entered college in the early 1970s. A sample of 7,376 entrants to 2- or 4-year colleges, enrolled in academic curricula, by fall of 1975, from the NLS-72 "Base Year" and "First Follow-Up" are used in the analysis. The study specifically focuses on educational attainment. College and university variables consist of private versus public control, level (university, 2-year or 4-year college) and various other specific characteristics such as ethnicity/gender composition, percent of minority and graduate students, size of enrollment, and tuition.

Findings regarding college and university type show that private college and university entrants receive high grades and have high levels of faculty contact and satisfaction. Those attending public institutions have a small advantage in overall attainment but tend to have lower grades and satisfaction levels and the least amount of faculty contact. 2-year college students tend to receive higher grades but have a lower chance of graduating. Colleges with a diversity of programs and majors appear to have higher rates of degree completion and overall attainment, although students have somewhat lower grades and lower levels of satisfaction. Colleges with high ability student populations and low SES composition have positive effects on degree completion, achievement and attainment goals. SES composition, however, appears to be more influential than ability composition. Minority composition has positive effects on grades but not on degree completion or attainment. It also has positive effects on persistence early on in the college career.

See Attainment—Educational and Occupational

71

Anderson, Kristine L. 1984. College Effects on the Educational Attainment of Males and Females. Washington, DC: U.S. Department of Education, National Institute of Education. ED 256 205

This study examines college experiences and educational attainment of students by merging data on postsecondary institutions and NLS-72 data. Experiences and attainment are examined in terms of institution type and college characteristics (such as average SAT score, percentage of incoming students with family income below \$6,000, proportion of major areas in vocational fields, institution size, highest degree granted, proportion of part-time students, educational and general expenditures per student and average tuition and fees). Respondents to NLS-72 who entered academic programs in a 2-year or 4-year college directly after high school graduation, and who completed the base year through 1979 follow-up surveys are included in the analysis. Separate analyses are performed for males and females.

Findings indicate that attending schools with a higher proportion of vocational programs, a higher proportion of part time students, higher costs and high SES composition is most detrimental to females' persistence and graduation rates. For men, larger size, higher proportions of part-time students, and high per student expenditures with low tuition costs were most detrimental.

The author suggests that more research be done on the measurement and analysis of college characteristics other than those most closely tied to "selectivity" or "quality." There is also a need for additional information on the role of different standards for academic performance at different kinds of institutions. The author proposes further exploring differences in involvement of students with the student role rather than with roles as spouse, parent or worker and examining the college outcomes for various types of students, such as nontraditional students.

See Attainment—Educational and Occupational

72

Clowe, Darrel A., and Levin, Bernard H. 1980. "How Do 2-Year Colleges Serve Recent High School Graduates?" Community College Review 7(3): 24-35.

This study examines patterns of postsecondary schooling for a sample of NLS-72 respondents. Patterns are looked at in terms of students' race, SES, aptitude, and also by type of college first attended. The most significant finding of the study is that blacks and whites have the same educational aspirations.

73

Hilton, Thomas L., and Schrader, William B. 1985. Students of the Humanities in the 1970s and 1980s. Washington, DC: National Endowment for the Humanities. ED 270 017

This report is a longitudinal study comparing the educational paths of 1972 and 1980 senior humanities majors. Data from the NLS-72 for 1972 seniors who received a bachelor's degree in the humanities by October 1979 and for a comparison

group of 1980 seniors from High School and Beyond are used in the analyses. Specific questions for the 1972 group included: (1) By what pathways did they progress to their degree?; (2) How did the humanities students differ from students who had earned a bachelor's degree in other fields by October, 1979?; (3) How did the humanities students differ in 1972 from students who majored in other fields?; and (4) How did the humanities students differ in 1972 from humanities students in 1980?

Findings indicate that humanities majors had higher test scores and grades than students majoring in other areas. In addition, the net number of students majoring in the humanities increased from the freshman to senior year for the 1972 cohort. No evidence existed indicating limits in postbaccalaureate educational and career opportunities for humanities majors. Finally, results show that humanities serve the educational needs of a wide range of undergraduates.

74

Conaty, Joseph C., Alsalam, Nabeel, James, Estelle, and To, Duc-Le. 1989. "College Quality and Future Earnings: Where Should You Send Your Sons and Daughters to College?" Paper prepared for the 1989 Annual Meeting of the American Sociological Association.

The authors use data from the "Fifth Follow-Up" of the NLS-72 to examine the impact of college characteristics (as an indicator of college quality) on future earnings of college graduates. The influence of variables such as student expenditures, student body composition, college type as well as student behavior while at college (academic achievement, curriculum, use of time and effort) and gender differences on income are explored. A sample of 1,320 men and 1,009 women with college degrees, whose graduate institution is identified, who took at least 60 credit hours at that school, and who worked for an employer at least 20 hours a week in 1985 is used in the analysis. Data on institutional characteristics are taken from HEGIS and data on college experience are taken from PETS.

General findings indicate that the impact of college on future earnings is small, especially for

men. What students do while they are at college matters more than which college they attend.

75

Hunter, Vincent Curtis. 1986. Academic Achievement and Self Attitudes: A Longitudinal Study with Background Controlled. ED 303 526

Data from NLS-72 are used to determine the relationship between student achievement and self-attitudes (such as self-concept and locus of control). A sample of 4,628 participants in the study (base year through third follow-up surveys) is included in the analyses. The specific question addressed was whether self-referent attitudes have lasting effects over time on educational achievement, independent of the effects of background and attitude.

Findings show achievements and attitudes have a small, significant relationship after background influences have been controlled. This relationship generally remains stable over time.

76

James, Estelle, Alsalam, Nabeel, Conaty, Joseph C., and To, Duc-Le. 1989. "College Quality and Future Earnings: Where Should You Send Your Child to College?" Economics of the Education Industry 79(2): 247-252.

This study examines the influence of college quality (here defined as future earnings) on male college graduates. A sample of 1,241 males who had received a college degree, whose graduating institution was identified, who took at least 60 credit hours in the identified school, and who worked for an employer in 1985 is used in the analysis. Institutional data are drawn from HEGIS and college experience data are taken from PETS.

Findings indicate that characteristics such as selectivity and private East coast location have positive impacts on earnings. Expenditures per student had insignificant effects. College experience variables, such as GPA and major, explain more of the difference in earnings than do measured family background, ability, and college characteristics combined.

Kanouse, David E., and others. 1980. Effects of Postsecondary Experiences on Aspirations, Attitudes, and Self-Perceptions. Washington, DC: Department of Health Education and Welfare. ED 214 430

The effects of postsecondary experiences on the development of young people's aspirations, attitudes, and self-conceptions during their first 4 years after high school were studied. Attention was directed to self-esteem; orientations toward work, family, and community; sex-role attitudes; educational expectations; career aspirations; satisfaction with career progress; and locus of control.

To determine the effects of career and educational choices on the outcomes of education, comparisons were made among groups that followed different tracks after high school graduation, including postsecondary education, entry into the civilian labor force, military service, full-time homemaking, and unemployment. An individual effects model was used to adjust observed outcomes over a 4-year period for initial differences in ability, high school achievement, family background, and other factors. In addition, changes in outcome measures over time were analyzed.

Theoretical perspectives concerning self-concept and its relationship to life choices made in young adulthood are briefly considered, and the NLS-72 database and study methodology, including the development of a "Career Aspiration Index," are examined. The main finding is that the initial differences between young people who enter various postsecondary tracks are generally much greater than relative changes that emerge thereafter. Postsecondary experience generally had less effect on attitudes and aspirations than did factors that led to their initial choices. (Adapted from ERIC abstract)

Robertshaw, Dianne and Wolfle, Lee M. 1981. "The Cognitive Value of 2-Year Colleges for Whites and Blacks." Integrated Education 19(3-6): 68-71. See also paper presented at the Annual Meeting of the American Educational Research Association, New York, NY, March 19-23.

Data drawn from the "Fourth Follow-Up" of the NLS-72 are used to evaluate verbal and quantitative skills of students. Achievement test performance for 1,273 whites and 327 blacks who (1) received certificates or licenses for completion of noncollege-related vocational programs; (2) who graduated from 2-year colleges in a vocational education program; (3) who graduated from a 2-year college general education program; or (4) who graduated from 4-year college programs, is compared to those who did not continue on to postsecondary education.

Results for white students indicate that the mean level of both verbal and quantitative achievement of those who received postsecondary education was significantly different from the achievement of those who did not, even when controlling for SES and 1972 test scores. Verbal test performance rose between 1972 and 1979 while math scores experienced a general decline. For black students, the same pattern was found, although their mean scores were considerably lower than the scores of their white peers with similar educational background. Also, when comparing scores of those with some postsecondary education to the scores of those with none, the only significant difference is found for black, 4-year college graduates.

These findings suggest that math competence may decline or remain the same over time, regardless of the type of education obtained, and that 2-year colleges contribute to the cognitive development of their students, although the benefits may be greater for white students. However, limitations such as lack of a more comprehensive measuring instrument and lack of larger samples of community college graduates (especially blacks) need to be taken into account.

Sharp, Laure M., and Weidman, John C. 1989. "Early Careers of Undergraduate Humanities Majors." Journal of Higher Education 60 (5): 544-64.

The study assesses the extent to which college major plays a decisive role in the early career patterns and subsequent occupational attainments of those entering the workforce with a bachelor's de-

gree in the humanities. In addition, the study also explores the effects of family background characteristics, self-concept, personal goals, aspirations, academic performance in college and quality of the institutions from which the graduate receives the degree, on the process of early career attainment for undergraduate humanities majors.

The authors used the NLS-72 base year through the 1979 follow-up surveys to describe the employment status of and jobs held by college graduates who had been in the labor market for, at most, 3 years since receiving their undergraduate degrees. Findings indicate little difference between humanities graduates and those in other fields in terms of prestige, pay, and extent to which their jobs involved working with ideas during the early stages of their careers. Data, then, do not appear to support the prevailing notion that humanities majors, compared to those majoring in other areas, are at a disadvantage in the labor market, although humanities majors were somewhat less likely to work full-time and more likely to work part-time. Also, using Duncan's socioeconomic index of occupational status (SEI), the authors found that men and women who majored in humanities and liberal arts were in a lower prestige cluster (with women doing somewhat better than men). Findings also show consistent differences in earnings between men and women, with men having a steady earnings advantage in all fields (although the gap is narrowest in education).

See Attainment—Educational and Occupational

80

Sharp, Laure M., and Weidman, John C. 1986. Early Career Patterns of Undergraduate Majors in the Humanities. Research Report Number 1. Pittsburgh, PA: School of Education University of Pittsburgh. ED 274 258

A forerunner to #79, this exploration also considered first jobs and career attainments of college graduates with baccalaureate degrees in the humanities soon after receipt of their degrees. Outcomes for humanities majors were also compared to outcomes for social science, business, and education majors,

as well as graduates who majored in interdisciplinary studies in the liberal arts and sciences. The authors concluded that while a sizable proportion of humanities graduates have not been launched on professional careers during the early postcollege years, their work experiences have not been discouraging and have differed little from the work experience of their contemporaries who majored in other fields. Detailed findings are presented, along with appendices that explain study variables and provide information on the number of bachelor's and master's degrees conferred, by major, for U.S. colleges since academic year 1968-69. (Adapted from ERIC abstract)

See Attainment—Educational and Occupational

3. Financial Aid

81

Brown, Kenneth G. 1980. "Dropout Rates: A Longitudinal Analysis of Student Loan Users Compared With Users of Other Forms of Financial Assistance. AIR Forum 1980 Paper." Paper presented at the Annual Forum of the Association for Institutional Research, Atlanta, GA, April 27-May 1. ED 189 956

This study focuses on differences in college dropout rates between loan users and users of other forms of aid. The units of analysis are: loans only, loans in combination with other aid, other aid only, and aid from families only. Data were drawn from the NLS-72 base year through 1974 surveys. Findings show dropout rates to be higher in the first year of college than in the following 2 years. Students relying on loans only or family aid only had higher dropout rates than students using loans in combination with other types of aid. Low SES students had higher dropout rates when relying exclusively on loans or on family aid than did high SES students. (Adapted from ERIC abstract)

82

Hansen, W. Lee. 1982. Economic Growth and Equal Opportunity: Conflicting or Complementary Goals in Higher Education. Washington, DC: National Institute of Education. ED 227 761

This study examines the effects of student financial aid on changing the composition of the population attending or planning to attend college. A discussion of policies from the 1960s to the early 1980s and their effects is included. Data from the NLS-72 as well as the High School and Beyond and the Current Population Survey are used to determine the effects of aid on enrollment rates.

Results of the study failed to show that the increase in available aid from 1972 to 1980 changed the plans of college-going high school seniors. While increases in enrollment rates occurred for blacks and women, it is difficult to attribute these changes to increases in aid. The author feels that it is hard to explain why enrollment and plans to enroll did not change as expected considering an increase in student financial aid. He suggests that aid simply acted as a means to transfer funds, therefore reducing the burden for parents and students and at the same time failing to increase or change the mix of current enrollment.

83

Leslie, Larry. 1984. "Changing Patterns in Student Financing of Higher Education." *Journal of Higher Education* 53(3): 313-346.

This study examines trends in student financing of higher education. Specifically, the author looks at parent contribution, tuition price changes, students' ability to finance their education, changes in debt reliance, the role of grants and scholarships in student financing, and the relative benefits to various groups of students.

The author uses data from the NLS-72 base year through 1976 surveys, and the Cooperative Institutional Research Program (CIRP) surveys to investigate any changes occurring over time in amount financed by students enrolled in higher education and in sources of student funds. Differences among various student groups (e.g., racial-ethnic groups, part-time and full-time, male and female) in relationship to type of institution attended are also examined.

Major findings from the NLS-72 data include: support from families decreases after students'

freshman year; part-time students contribute a larger portion of their personal finances to cover educational expenses and receive little aid; including family support, over 80 percent of student financing is from private sources; overall student access has been enhanced by lower net prices; students who enroll in vocational-technical programs in high school tend to pay a higher proportion of their net college costs compared to those who were in a general academic track; Whites and Asian-Americans self-finance the greatest amount while other minorities receive more student aid; student aid tends to favor lower ability students; and equity improvements have been primarily between low-income and middle-income families in regard to net price.

84

St. John, Edward P. 1989. "The Influence of Student Aid on Persistence." *Journal of Student Financial Aid* 19(3): 52-68.

This study looks at the influence of student aid, specifically of the different types of aid packages, on year-to-year persistence. The model used looks at persistence in terms of social background, academic ability and achievement, high school and college experience, and financial aid types. The NLS-72 seniors (n=4,485; base year through 1979 follow-up surveys) and the HS&B 1980 (n=4,178; base year through third follow-up surveys) and 1982 (n=3,965; base year through third follow-up surveys) cohorts who attended college are included in the analysis.

Findings indicate that the impact of loans on persistence has changed over time. For example, loans had negative effects in the 1970s for the first-to-second year transition and positive effects in the 1980s. In most models, attending college full-time, grades received in college, and beginning at a 4-year school as a freshman were positive and significant predictors of persistence. Postsecondary plans were also significant in all models studied. College experiences had an influence as well although there were some differences across years and cohorts.

85

St. John, Edward P., and Masten, Charles L. 1990. "Return on the Federal Investment in Student Finan-

cial Aid: An Assessment for the High School Class of 1972." Journal of Student Financial Aid 20(3): 4-23.

This study develops a model for estimating the returns from gains in educational attainment that are attributable to student financial aid. The authors view financial aid as an investment in human capital and the returns examined here are expressed as cash-flow ratios (the amount of money spent by the federal government on a certain cohort divided by the tax revenue on that investment for the same group). Data used in the study were taken from a 1983 Census report on lifetime earnings and from the NLS-72 base year through 1986 follow-up surveys.

Findings indicate that financial aid was a profitable investment during the 1970s. The net present value of each federal aid dollar in the 1970s is \$4.30. Under every set of economic assumptions (worst case/optimistic), investment in aid has a substantial rate of return.

86

St. John, Edward P., and Noell, Jay. 1989. "The Effects of Student Financial Aid on Access to Higher Education: An Analysis of Progress with Special Consideration of Minority Enrollment." Research in Higher Education 30(6): 563-581.

For description see entry #66.

See Access

87

Sanford, Timothy R. 1980. "The Effects of Student Aid on Recent College Graduates." Research in Higher Education 12(3): 227-24. Also see Sanford, Timothy R. 1980. "The Impact of Student Loans on Graduate Education." Paper presented at the Annual Forum of the Association for Institutional Research, Atlanta, GA, April 27-May 1. ED 189 936

The study examines the impact of undergraduate financial aid on subsequent life choices for a sample of 3,136 NLS-72 respondents who received a BA degree by October 1976. Effects of the type and amount of loan received on attending graduate

or professional school, choosing a job, forming a family and developing values were explored.

Results show that graduates with loans were slightly more likely to go to graduate or professional school regardless of loan amount. Contrary to expectations that loans would have negative impacts on subsequent life choices, students who received loans were similar to other graduates. Overall, aid in general did not have negative effects but the author cautions that the sample examined in the study is of recent college graduates and perhaps the long-term impact of aid should be examined in the future.

88

Terkla, Dawn Geronimo. 1984. "Does Financial Aid Enhance Undergraduate Persistence?" Paper presented at a joint meeting of the American Educational Research Association Division J and the Association for the Study of Higher Education, San Francisco, CA, October 28-30. ED 253 127

The purpose of this study is to explore the influence of financial assistance on persistence in higher education. Financial assistance is defined as work study, grants or loans. Dropout from higher education is defined as any student who entered a program at a 2- or 4-year school by October 1972, who had not obtained a BA or AA degree by May 1979 and who was no longer enrolled by May 1979. The data from this study are drawn from a sample of 4,838 respondents to the base year through fourth follow-up surveys of the NLS-72.

Findings show that SES, race, and sex had no direct influence on persistence. Only high school GPA and educational aspirations had stronger direct effects than did aid. Financial aid had the third strongest direct effect and the fifth strongest total effect on persistence. When controlling for other variables, slightly more than half the students receiving aid were likely to complete their degree.

See Persistence

89

Wagenaar, Theodore C. 1987. Changes in Postsecondary Educational Choices: 1972 to 1980. ED 284 481

Using data from NLS-72 and High School and Beyond 1980 cohort, this study examines changes in postsecondary education choices, in college application rates, in financial aid application and award rates, as well as changes in college attendance rates between 1972 and 1980. Comparisons are made by institution type, first, second, and third choice institution as well as by various background variables (including sex, region, and race).

Findings regarding changes in application rates, choice of institution, institutional characteristics, factors related to college choice, acceptance rates, financial aid, percentage of those who received grant, loans, or work study, and changes in attendance are included in the report.

Findings related to application rates indicate an increase in the percentage of seniors applying to postsecondary institutions, in the number of women applying, and a significant rise in the application rates among African-Americans. Changes in type of institution selected as a first choice school as well as in the quality of institutions selected were negligible between the 2 years. Financial aid, however, increased in importance as a factor in selecting a college. The majority of students in both years attended their first choice institution.

Regarding financial aid, more students applied for aid in 1980 than in 1972. Students were offered multiple sources of aid, particularly in the form of grant and loan combinations with grants and loans accounting for over two-fifths of total aid offered in both years at first choice institutions.

See **Patterns of Attendance**

4. Patterns of Attendance

90

Adelman, Clifford. 1988. "Transfer Rates and the Going Mythologies." *Change* (January/February): 38-41.

This article examines attendance patterns and credentialing at 2-year colleges and the role of time

in the educational experiences of students enrolled at 2-year colleges. Student background and changes in students' aspirations are also examined. Data from the NLS-72 and Postsecondary Education Transcript Study were used for the analysis.

Eight major findings from the article include:

(1) One out of five individuals who attend 2-year colleges eventually receives an Associate's Degree from a 2-year college.

(2) One out of three individuals who attend 2-year vocational or technical schools eventually receives either an Associate's Degree or certificate/license. (The credentialing rate from this type of institution is higher than for all 2-year institutions, but the type and mix of credentials are different.)

(3) One out of five individuals who attended 2-year colleges eventually attends a 4-year college, irrespective of whether a degree is earned at either type of institution.

(4) The vast majority of those who attend 2-year colleges are "lockstep" students (i.e., entering within a year of high school graduation).

(5) Slightly over half of those who earn Associate's Degrees do so "on time" (within 29 months of entering an Associate's Degree program).

(6) Four-year colleges award nearly one out of every five Associate's Degrees, yet their "de facto transfer rate" (from the lower to the upper division) is no better than that of public 2-year and private junior colleges.

(7) One-fourth of all students who attend 2-year institutions earn less than one-semester's worth of credits.

(8) Less than 2 percent of 2-year college attendees enrolled after they received the Bachelor's Degree.

See **Attainment—Educational and Occupational**

91

Burkheimer, Graham J., and Jaffe, Jay. 1981. "Highly Able Students Who Did Not Go To College." Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 212 682

This paper uses NLS-72 data to explore the following three questions: (1) What are the reasons that highly able students do not attend college?, (2) Are factors related to college attendance among able students the same as those for students of other ability levels?, and (3) What happens to highly able students who do not go to college in terms of early career attainment and family life? The NLS-72 sample consists of respondents who completed the base year through third follow-up surveys and includes 4,052 students of high ability, 7,000 of average ability and 4,788 of low ability.

Results indicate similarities among college-going students of all ability levels. They are generally characterized as not married by the second October after graduating from high school, having higher average SES levels, higher high school class ranks, more math and science courses, and higher educational expectations. Both groups, college and noncollege going, worked the same number of hours and earned roughly the same salary. Few members of the noncollege-going group felt they had achieved their career goals and less of them had entered professional or technical careers. Both groups, however, reported only mild satisfaction with their jobs.

See Attainment—Educational and Occupational

92

Cervero, Ronald M., and Kirkpatrick, Thomas E. 1990. "The Enduring Effects of Family Role and Schooling on Participation in Adult Education." American Journal of Education 99(1): 77-93.

The study explores reasons why adults participate in adult education, specifically examining those pre-adult factors identified in the theoretical literature as well as effects of prior educational attainment. The authors also look for any influences these factors have on participation in credit and noncredit

forms of adult education. Data are drawn from the base year through 1986 follow-up surveys of the NLS-72. Pre-adult factors included father's educational attainment, amount of high school and/or college, type of high school program, class rank in high school, and educational aspirations and attainment.

Findings strongly support the "proposition that participation in adult education is the outcome of a set of processes occurring throughout the life span." The authors suggest that future research should focus on identifying other factors, such as barriers to participation, as well as on the pre-adult factors included in this study. They also suggest that future research should "proceed on the assumption that different types of adult education may have different antecedents."

See Marriage/Family

93

Eagle, Eva, and Carroll, C. Dennis. 1988. Postsecondary Enrollment, Persistence, and Attainment for 1972, 1980, and 1982 High School Graduates. High School and Beyond National Longitudinal Study. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 304 036

The report uses data from the NLS-72 and the 1980 and 1982 high school seniors of the High School and Beyond Study as well as the Postsecondary Transcript Study (1984), to compare patterns of enrollment, persistence, and attainment among these cohorts for several years following high school. Patterns were analyzed in terms of sex, race and socioeconomic status.

Findings on enrollment indicate that:

(1) Rates of enrollment in postsecondary education for high school graduates increased between the 1972 cohort and the 1980 cohort, but declined for the 1982 cohort.

(2) For all three cohorts studied, enrollment was higher for whites than for blacks or Hispanics, and there was a positive relationship between enrollment and socioeconomic status.

(3) The proportion of students who first entered postsecondary education during the second year after high school graduation was higher for the 1980 and 1982 cohorts than for the 1972 cohort. There were new enrollees each year after graduation in each cohort with a higher enrollment for the 1980 cohort, regardless of sex, race-ethnicity or socioeconomic status.

(4) Rates of persistence during the first year of school did not vary among cohorts for students who enrolled immediately in postsecondary education.

(5) The rate of persistence through 4 years of postsecondary education was lower in each successive cohort for blacks. Among whites and Hispanics, fewer 1982 or 1980 graduates persisted through 4 full years than 1972 graduates, although there was no significant decline between the last two cohorts.

(6) Rates of attainment for the 1982 and 1972 cohorts were about the same, except that the 1982 cohorts had higher attainment rates among blacks, Hispanics, and low SES students.

See Attainment—Educational and Occupational

94

Eagle, Eva, and Schmitt, Carl. 1990. Patterns and Trends of Stopping Out from Postsecondary Education: 1972, 1980 and 1982 High School Graduates. E.D. TABS. National Longitudinal Study 1972. High School and Beyond. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 314 509

Data from all NLS-72 surveys and the Postsecondary Education Transcript file and High School and Beyond 1980 senior and sophomore cohorts base year through third follow-up surveys are used to examine patterns of stopping out and dropping out from postsecondary education. The analysis focuses on time of entry, educational outcomes, and selected student characteristics.

Major findings include:

(1) Students who delayed entry into postsecondary education were more likely to drop out than those who entered immediately after high school graduation.

(2) The drop out rate was higher at 2-year institutions than at either 4-year, or less-than-2-year institutions.

(3) Stopping out was more common at 2-year and 4-year institutions than at less-than-2-year institutions.

(4) Males and females generally stopped out of postsecondary education at the same rate.

95

Eagle, Eva, and Schmitt, Carl. 1990. Patterns and Trends of Delayed Entry into Postsecondary Education: 1972, 1980, and 1982 High School Graduates. E.D. TABS. National Longitudinal Study 1972. High School and Beyond. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 314 508

Data from the NLS-72 base year through fifth follow-up surveys and Postsecondary Education Transcript File, and High School and Beyond 1980 senior and sophomore cohorts base year through third follow-up surveys, are used to describe patterns and trends of delayed entry into postsecondary education. Differences in program type, type of institution, and time of entry into postsecondary education are examined. Information on enrollment and mean length of delay is included in several tables.

Major findings include:

(1) Students entering 2-year or 4-year institutions delayed entry less than those who entered institutions offering less than 2-year programs.

(2) A higher proportion of students who entered 4-year institutions entered in the fall term

immediately after high school graduation, as compared to students in other types of institutions.

(3) Compared to the 1972 cohort, a higher proportion of the postsecondary students from the 1980 and 1982 graduating classes enrolled in institutions offering programs of less than 2 years.

96

Eagle, Eva, and Schmitt, Carl. 1990. Patterns and Consequences of Delay in Postsecondary Education: Degree Attainment for 1972, 1980, and 1982 High School Graduates. Survey Report. National Longitudinal Study 1972, High School and Beyond. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 314 507

This report, using data from the NLS-72 base year through fifth follow-up surveys and Postsecondary Education Transcript File, and High School and Beyond 1980 senior and sophomore cohorts base year through third follow-up surveys, describes patterns of delay in entering 4-year, 2-year, and less-than 2-year postsecondary institutions for 1972, 1980 and 1982 high school graduates. The report does not compare cohorts (findings have not been standardized to account for differences in the opportunity to enter postsecondary education) but compares students within each cohort by institution type, SES and gender.

The report examines two types of enrollment patterns: delayed entry (defined as enrollment later than October of the high school graduation year), and stopping out (defined as the practice of leaving school for more than 2 months or a summer period and returning to school after that break). The report examines delay from an institutional perspective, which classifies students' enrollment with respect to the institution type as well as their time of entry or the continuity of their enrollment.

Findings reveal diverse enrollment patterns of students from the three cohort groups.

(1) Over 40 percent of high school graduates from these cohorts enrolled in 4-year institutions by

1986, 30 percent enrolled in 2-year institutions and 10 percent in less-than- 2-year institutions.

(2) A significant number of students enrolled in postsecondary education later than the fall of the year they graduated from high school and the rates of delayed entry were related to institution type. Students seemed more willing to delay beginning shorter postsecondary programs than longer programs.

(3) Fewer students delayed by stopping out than by entering late. The stopout rate was also related to institution type with the lowest stopout rate found at less-than-2-year institutions. Stopout rates for the 1980 and 1982 cohorts were higher for students at 4-year than at 2-year institutions, while the stopout rate for the 1972 cohort was higher at 2-year than at 4-year institutions.

(4) Students who delayed entering or who stopped out from each type of postsecondary institution were significantly less likely to earn a degree from such an institution or, in the case of less-than-4-year institutions, to transfer to 4-year institutions.

(5) Attainment rates were lower for stopouts than for delayed entrants.

(6) Students from high SES backgrounds were less likely to delay entry into 4-year institutions than were other students. A higher proportion of low SES students in 4-year institutions delayed entry than did either medium or high SES students.

(7) There is no relationship between gender and the likelihood of delay among students at any postsecondary institution.

97

Eagle, Eva, and Schmitt, Carl. 1990. Consequences of Delay in Postsecondary Education: Degree Attainment for 1972, 1980, and 1982 High School Graduates. E.D. TABS. National Longitudinal Study 1972, High School and Beyond. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 314 506

Data from the NLS-72 base year through fifth follow-up surveys and Postsecondary Education Transcript File, and High School and Beyond 1980 senior and sophomore cohorts base year through third follow-up surveys, are used in this E.D. Tabulation to present data on the effects of delayed entry into postsecondary education on degree attainment. Patterns of delay are compared for the three cohort groups by pattern of enrollment, type of institution, and selected student characteristics.

Findings show:

(1) Delays in beginning postsecondary education lower the rate of degree attainment.

(2) Students who begin postsecondary education immediately after graduating from high school are more likely to complete a postsecondary degree than those who delay entry.

(3) Students at 4-year institutions who delayed initial enrollment were more likely to attain their degree than those who delayed enrollment at other types of institutions.

98

Grubb, W. Norton. 1991. "The Decline of Community College Transfer Rates. Evidence from National Longitudinal Surveys." Journal of Higher Education 62(2): 194-216.

This study uses the NLS-72 and HS&B surveys and PETS files to examine transfer rates of community college students. The first section looks at overall trends in transfer rates. Section II examines rates in terms of gender, race-ethnicity, family background, high school performance and postsecondary education aspirations. The third section includes information on transfer rates of BA completers. The final section presents implications of the results for programs seeking to enhance transfer. Possible causes of changes in transfer rates are also included.

General findings show a decline in transfer rates between 1972 and 1980. The author suggests that the rise of community college vocational pro-

grams may be the reason behind some of the decline. Changes in transfer rates did not appear to be related to changes in the composition of students in terms of their racial-ethnic background, SES, ability, aspirations, and high school track. Findings also indicate a decline in the rates of BA completion within 4 years after high school between 1972 and 1980. The likelihood of completing the BA, however, increases over time. The author concludes that declining transfer rates may be due to many small factors including changing demographics, decline in achievement during high school, poor career counseling in high school, the "apparent weakening of academic Associate degree programs as routes to transfer, an increase in 'milling around' in all of postsecondary education, and declining federal aid." He also suggests that recent innovations, such as articulation agreements, may enhance transfer rates.

See Persistence

99

Hilton, Thomas L., and Schrader, William B. 1987. Pathways to Graduate School: An Empirical Study Based on National Longitudinal Data. Princeton, NJ. GRE Board Research Report No. 82-21R/ETS Research Report 87-41.

This study explores the pathways students take from high school to graduate and professional school. Differences in characteristics between those who went on to graduate school and those who went to professional school are compared. All NLS-72 respondents who earned a bachelor's degree by fall 1979 and were enrolled as full-time graduates for at least one semester between fall of 1975 and 1979 are included in the sample. Respondents are examined at five key points in the educational process: as high school seniors, as new college students, 2 years after college entrance, as bachelor's degree recipients, and as enrollees in graduate or professional school. The authors examined the impact of such factors as high school curriculum, type of postsecondary institution attended, being "on track" toward a degree 2 years after high school, the field in which the BA degree was earned, and attendance in graduate school. Gender and ethnic differences were also examined. An analysis of prospective graduate stu-

dents in the 1980s compares HS&B 1980 seniors with 1972 seniors in regard to numbers of graduate students, ability, and educational aspirations.

Overall findings indicate slight differences between patterns and choices of students entering graduate school and those enrolling in professional school. Both groups took a more academic curriculum in high school. Women and men followed similar paths to graduate school although fewer women enrolled in professional school. The authors found significant relationships between SES and educational attainment, as well as between type of college first entered and both earn a BA and enroll in graduate or professional schools. They believe it is possible to predict graduate or professional enrollment as early as high school using their model although measures taken after high school graduation are more highly related to enrollment in graduate or professional schools.

See Attainment—Educational and Occupational

100

Jackson, Gregory A. 1986. "MISAA (the Middle Income Student Assistance Act), The Fall of Saigon, and College Choice, 1972 to 1980." ASHE 1986 Annual Meeting Paper. Washington, DC: U.S. Department of Education, National Institute of Education. ED 268 867 (See also ED 275 224)

This report compares changes in high school graduates' college choices between 1972 and 1980. Specific questions examined are (1) How did the importance of different influences on college choice change over time?; and (2) How did these changes interact to affect college entry rates? Data focus on college and university enrollment 15 months following high school graduation (fall 1973 for the NLS-72 seniors and 1981 for the HS&B 1980 seniors).

Overall, the rate of college going was stable between 1972 and 1980. College choice processes also remained steady over time. When major changes in participation did occur, and only for subsets of the overall student population, they tended to result from policy or social changes, such as Pell Grants, BEOGs, and federal programs aimed

at increasing college participation among underrepresented groups.

101

Jackson, Gregory A. 1986. Workable, Comprehensive Model of College Choice. Final and Technical Report. Cambridge, MA: Harvard University. ED 275 224 (See also ED 268 867)

This study, similar to entry #100, analyzed NLS-72 and High School and Beyond to assess changes in college choice patterns over time. The author specifically looked at relationships between student attributes and college choice.

Main findings show a change in SES variables (an increase in parent education and income), changes in academic variables (including a decrease in the number of students in academic programs) and an increase in the number of students receiving aid. Even with those change patterns, college choice remained stable between 1972 and 1980. College participation rates also remained essentially unchanged during this time.

102

Robertshaw, Dianne, and Wolfe Lee M. 1980. "Discontinuities in Schooling and Educational Attainment." Paper presented at the Annual Meeting of the American Educational Research Association Boston, MA, April 7-11. ED 186 488

Based upon prior research on status attainment, the authors examine the differences between those who delayed and those who interrupted postsecondary education 4 1/2 years after high school. A sample of 3,300 white male respondents of the NLS-72 is used in the investigation.

Findings show that students who were 20 years old or older when they graduated from high school in 1972 were less likely to go on to postsecondary education than those who graduated "on time." Results for those who actually attended postsecondary institutions show that levels of ability and grades affect both entrance into postsecondary education

and amount of education. Also, higher educational and occupational aspirations have a positive effect on education. Findings also show differences in educational attainment based on type of institution attended. In general, those who attain more education are those who enter college without delay and remain there through graduation.

See Attainment—Educational and Occupational

103

Robertshaw, Dianne, and Wolfle Lee M. 1983. "Discontinuities in Schooling and Educational Attainment." *Higher Education* 12: 1-18.

This study expands the authors' previous research (see entry #102) and includes black males, and white and black females in the sample studied. Results for the additional groups were similar to those for white males. Factors causing educational discontinuities were the same for white males and females, although the effects of these factors on educational attainment were twice as great for women. Social background and father's occupation affected educational progress for black males but did not affect white males. The effect of delaying the start of postsecondary education had a greater influence on blacks than on whites while interrupting education influenced whites more.

See Attainment—Educational and Occupational

104

Thomas, Gail E. 1981. "Choosing a College Major in the Hard Technical Sciences and the Professions: A Causal Explanation." Washington, DC: U.S. Department of Education, National Institute of Education. ED 206 829

A causal framework was used to explore factors that affect the enrollment of 4-year college students in the hard technical sciences (math, science, engineering) and the professions (pre-law, medicine, dentistry). The factors studied were family status, standardized test performance, high school rank, educational expectations, high school math and science preparation, college charac-

teristics, and college grades. The NLS-72 was the database used in a path analytic approach to evaluate determinants of college major field choice. Findings showed that sex and high school major field intentions were the two most important determinants. Being female exerted a large direct negative effect on majoring in the hard and technical sciences and the professions. The intention to major in these fields at the high school level was positively related to actually pursuing a college major in these fields. Findings from past studies regarding the importance of standardized test performance and high school math and science preparation were not strongly supported by present data. (ERIC abstract)

105

Wagenaar, Theodore C. 1987. *Changes in Postsecondary Educational Choices: 1972 to 1980*. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 284 481

For description see entry #89.

See Financial Aid

5. Persistence

106

Anderson, Kristine L. 1986. "College Contexts, Student Integration, and Educational Attainment. ASHE 1986 Annual Meeting Paper." Paper presented at the Annual Meeting of the Association for the Study of Higher Education, San Antonio, TX, February 20-23. ED 268 874

For description see entry #68.

See College/Program Effects

107

Grubb, W. Norton. 1991. "The Decline of Community College Transfer Rates. Evidence from National Longitudinal Surveys." *Journal of Higher Education* 62(2): 194-216.

For description see entry #98.

See Patterns of Attendance

108

Hilton, Thomas L., and Lee, Valerie E. 1988. "Student Interest and Persistence in Science: Changes in the Educational Pipeline in the Last Decade." Journal of Higher Education 59(5): 510-26.

The authors make predictions about "who will do science" at the end of this decade by incorporating both cross-sectional and longitudinal data to outline patterns of persistence in science and math education (MSE).

Cross-sectionally comparing two longitudinal studies—NLS-72 and High School and Beyond (starting with data from 1982 HS&B cohort so the two groups would be at comparable educational levels)—the authors assessed the proportion of students expressing an interest in majoring in MSE at six transitional points along the educational pipeline, the net loss at each of these points (movement into and out of the pipeline), and any differences in interest in science between the two cohort groups.

Results indicate a small net loss of MSE majors for the total population and all subgroups, except for blacks from 1980 to 1982. The greatest loss occurred during the transition from high school to college, "reflecting both loss to science and loss to higher education." Losses occurred less frequently once students enrolled in college as a result of high persistence in MSE, not as a result of additional numbers of students in MSE.

For the 1982 cohort, the proportion of the total sample moving into MSE between the sophomore and senior years was virtually identical to the proportion moving out of MSE. The greatest loss for the 1972 cohort occurred in the transition from high school to college (data for sophomore to senior year is not available in NLS-72). Data from the 72 cohort sample was used to look at "leaks" occurring at the postsecondary level (postsecondary data were not

yet available for the 82 cohort). Loss from first year to junior year and from third year to graduation occurred due primarily to students dropping out of college rather than to switching out of an MSE major. The second greatest loss occurred between undergraduate school and full-time graduate school. The authors conclude that the future MSE population will continue to be primarily white and male, but with a substantial growth in the number of minorities and women.

109

Hilton, Thomas L. 1982. Persistence in Higher Education. College Board Report No. 82-5. New York, NY: College Entrance Examination Board; Princeton, NJ: Educational Testing Service. ED 227 737

The author uses NLS-72 "Base Year," "First" and "Second Follow-Up" surveys to examine attendance patterns of persisters and dropouts from college and vocational-technical schools as well as to test a model of persistence. The basic hypothesis of the study was that persistence (defined here as the relationship of educational status and educational aspirations over time) in higher education results from the impact of a "chain of career decisions by the individual student."

Findings show that 26 percent of high school seniors continued their education in either 2- or 4-year colleges without interruption from 1972-1974. A slightly higher percentage of white students than blacks continued after high school although, among the group that continued, the drop out rate did not differ significantly between black and white students or male and female students.

Findings of the causal model indicate that retention in higher education is influenced primarily by prior educational status, which was influenced, in turn, by high school curriculum. Persistence was also influenced by academic performance. Unexpectedly, variables such as race, sex, SES and number of hours worked did not affect persistence when controlling for other causal variables.

110

Munro, Barbara Hazard. 1981. "Dropouts from Higher Education: Path Analysis of a National Sample." *American Education Research Journal* 18(2): 133-141.

Using a sample of 6,018 NLS-72 respondents who entered 4-year colleges as full-time students in 1972, the author tests Tinto's model of student persistence. The model looks at the impact of background characteristics and the levels of social and academic integration (extent of student involvement in the social and academic communities at the institution) on student persistence.

Results indicate that the effects of ethnicity and SES were indirect. Overall, goal commitment had

the greatest effect on student persistence. Both student and parent educational aspirations had stronger effects on goal commitment than academic integration. Academic integration had stronger effects on institutional commitment than did social integration.

111

Terkla, Dawn Geronimo. 1984. "Does Financial Aid Enhance Undergraduate Persistence?" Paper presented at a joint meeting of the American Educational Research Association Division J and the Association for the Study of Higher Education, San Francisco CA, October 28-30. ED 253 127

For description see entry #88.

See Financial Aid

VI. Aspirations—Educational and Occupational

112

Brown, Kenneth G. 1982. "Postsecondary Plans of High-School Seniors in 1972 and 1980. Implications for Student Quality. AIR Forum." Paper presented at the Annual Forum of the Association for Institutional Research, Denver, CO, May 16-19. ED 220 060

This study compares the postsecondary educational aspirations of black and white high school seniors in 1972 and 1980 by using NLS-72 and High School and Beyond data. The study looked specifically at plans to attend vocational school, vocational programs at a community college, academic programs at community colleges and 4-year colleges or universities. These plans were examined in terms of aptitude levels (lower, middle, and upper).

Findings show more students at both high and low aptitude levels planning to go to 4-year schools in 1980 than in 1972, while a smaller percentage planned to attend vocational schools. Black students showed an increase in their plans to attend community colleges.

Findings regarding aptitude show an increase in the percentage of blacks in the top and middle aptitude levels and a decrease in the lowest level. The author warns, however, that factors such as nonresponse rates, and declines in ACT and SAT scores, make it difficult to reach definitive conclusions on aptitude levels based on the above-mentioned result alone.

113

Falkowski, Carolyn K., and Falk, William W. 1983. "Homemaking as an Occupational Plan: Evidence from a National Longitudinal Study." *Journal of Vocational Behavior* 22: 227-242.

This study compares occupational choices, background, and social-psychological variables of those who expect to become homemakers and of those who do not. In general, the authors expect that those who choose homemaking have fathers with lower occupational status, nonemployed mothers,

rural residence, are in the nonacademic track, and have lower scholastic performance. The sample consists of 463 black and 4,227 white women who completed both the "Base Year" and "First Follow-Up" of the NLS-72.

Results show a higher number of white women expect to become homemakers. Differences between blacks and whites were also found in locus of control (blacks perceived more external locus of control), social psychological variables (black women had higher self-esteem) and life importance categories (large differences on money and work items). Race aside, the authors' expectations were correct in that women from rural areas whose fathers had lower occupational status, whose mothers never worked outside the home, and who were enrolled in nonacademic tracks with low scholastic performance were more likely to become homemakers.

114

Holsinger, Donald B., and Chapman, David W. 1984. "Students' Occupational Aspirations and Choice of College Type." *College Student Journal* 18: 87-93.

Changes in career aspirations during college for men, women, Mexican-American and Anglo students and the differences in the changes for those at 2-year and 4-year colleges were examined using the base year and first through third follow-up surveys of the NLS-72. A general decline in occupational aspirations during college occurs although the decline was greatest for Mexican-American women and Anglo men. Students attending 2-year colleges experienced a much greater decline in occupational aspirations than did 4-year college students. Findings raise implications for advising and counseling at high schools and at the 2-year college level as information needs appear to differ by student background and across institutional type.

115

Lindsay, Paul, and Knox, William E. 1984. "Continuity and Change in Work Values Among Young

Adults: A Longitudinal Study." American Journal of Sociology 89(4): 918-931.

The authors develop a model to examine the relationships among intrinsic and extrinsic work values, education and work. They expand previous work on this topic by incorporating four additional factors: (1) how already existing values influence choice, selection, and participation in education; (2) whether educational experiences have socializing effects on values; (3) how education may influence occupational placement; (4) how social status attributes may be related to values and work. The stability of values over time is also assessed. The study sample includes 9,208 respondents to the NLS-72 who reported a work history during the 12 months prior to the 1979 survey.

Findings indicate the complexity of the occupational selection process. Educational attainment and prior existing values exhibit influence on future job characteristics while SES is a strong predictor of educational attainment. Findings also lend some support for the idea that values are influenced by the socializing effects of work experience (occupational-socialization hypothesis). Evidence strongly supporting the value-stability hypothesis (work values remain stable over time), was also found. Gender was found to be a major influence as it related to initial work values, educational attainment and most strongly to income.

116

Ohlendorf, George W., and Rafferty Donna M. 1982. The Educational and Occupational Aspirations of Louisiana Rural High School Students: A Comparative Study. Baton Rouge, LA: Louisiana State University, Agricultural Experiment Station. ED 218 020

The study uses samples of students from the Southern Youth Study (n=453) and the NLS-72 (n=4,738) to gain greater understanding of the educational and occupational aspirations of rural students in Louisiana. The cohorts studied allow for comparisons on regional and national levels.

Results show a decrease in educational aspirations of Louisiana students between 1968 and 1972. Educational aspirations of the 1972 cohort were also lower than those of both the southern region and the U.S. The authors believe that higher occupational aspirations of the rural students indicate that they may have been related to employment opportunities in Louisiana at the time. Differences in aspiration over time may also be attributed to the social activism of the 1960s and 1970s when students often preferred alternative goals.

117

Smith, Michael Francis. 1982. A Comparison of Postsecondary Educational Plans of Black and White High School Students in 1972 and 1980. Doctoral Dissertation, University of Arizona, Publication No.: AAC8217473

The educational plans of black high school seniors over the past decade were examined and compared to the plans of white students by analyzing selected base year data from the NLS-72 and HS&B.

Expectations to participate in postsecondary education were essentially the same for all black and white seniors between 1972 and 1980. Among whites, womens' expectations exceeded mens' in 1980. When levels of educational expectation were examined, significant differences were apparent for both races. Large declines occurred in the 4-year college category though they were partially offset by increases in the graduate school category. Small increases also occurred among both blacks and whites in the community college category. No clear trends were seen in the vocational school category. Black expectations were greater than those of whites in the combined upper two categories with the most striking difference seen among low-aptitude and low-SES students.

Immediate plans for 2- or 4-year college attendance changed significantly for both blacks and whites with more students indicating 4-year preference in 1980. Overall, more blacks than whites planned 4-year attendance in both survey years, with the largest differences between races found on the low- and middle-aptitude levels.

Preferences for planned field of study also changed for both blacks and whites between survey years. The largest increase for both races occurred in the business category, with the next largest expansion appearing in engineering. The largest decreases occurred in education and the social sciences, with the downturn being greater among blacks than whites. Black and white seniors in the middle, and upper-aptitude levels were more likely to select the biological and physical sciences, engineering, and social sciences while low-aptitude seniors were more likely to choose vocational studies, health-related studies, and education. (Dissertation abstract)

118

Smith, Wayne E. 1982. "Factors related to the Performance of 2-Year College Transfer Students. AIR Forum 1982 Paper." Paper presented at the Annual Forum of the Association for Institutional Research, Denver, CO, May 16-19. ED 220 052

In light of the predicted decline in the college-going population, this study examines and compares postsecondary education plans of 1972 and 1980 black and white high school seniors. Plans are examined in terms of school categories (vocational schools, community college vocational and academic programs and 4-year college or university) and aptitude levels (lower quartile, middle two quartiles, and upper quartile). The three samples used in the study are (1) all students who answered base year surveys of the NLS-72 and HS&B students who responded to postsecondary planning questions, (2) a subset of all black students included in set 1, and (3) a subset of all white students included in set 1.

Major findings include a larger percentage of more able students planning to attend 4-year institutions, a smaller percentage of the overall population planning to attend vocational schools, an increase in the percentage of African-American students in the top quartile of aptitude and a decrease in percentage of those in the lowest quartile. The author does caution that the latter results may be due to differences in nonresponse rates for NLS and HS&B and may be better explained by evidence from SAT and ACT tests.

119

Yang, Shu-O W. 1981. "Rural Youths' Decision to Attend College: Aspirations and Realizations." Paper presented at the Annual Meeting of the Rural Sociological Society. Guelph, Ontario, Canada, August 19-23. ED 207 765

The influence of peers, teachers, counselors, and parents on college attendance decisions of rural youth is analyzed using the NLS-72 "Base Year" and "First Follow-Up." Other variables, such as high school grades, family SES, number of siblings, and students' beliefs regarding their ability to handle college level study are also included in the analysis.

Findings show that high school grades, and both parents' and peers' influence are significantly related to college aspirations and actual college attendance. Mothers' expectations had the strongest effect. Self-confidence in completing college study did not contribute as a factor in students' aspirations although it did have a positive impact on actual college attendance.

VII. Attainment—Educational and Occupational

120

Adelman, Clifford. 1991. Women at Thirtysomething: Paradoxes of Attainment. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

This study describes the educational careers and labor market experience of women in the class of 1972 through the time they were 32 years old ("Fifth Follow-Up"), and sets its analysis in the context of national economic development and the social utility of equity.

Women's academic performance in high school was far stronger than that of men, yet, at the same time, both their educational aspirations and plans were lower than those of men. Nonetheless, they continued their education after high school at the same rate as men, were rewarded more with scholarships for postsecondary education, and completed college degrees faster than did men. Using the cleaned PETS data, the study reveals more subtle patterns of differences in curricular paths than previously assumed and shows that women's grade point averages in college were higher than men's no matter what field they studied. As a result of their undergraduate achievements, the educational aspirations of women changed considerably, with dramatic increases aspiring to graduate degrees. From age 18 to 32, the women of the class of 1972 developed more positive attitudes toward education than did men, and came to believe that they truly benefited from schooling.

These benefits, however, did not hold up in the labor market, where evidence of women's superior educational performance and commitment was discounted. Between ages 25 and 32, for example, a much higher percentage of women than men experienced genuine unemployment, no matter what degree they earned. In only 7 of 33 major occupations did women achieve pay equity with men by age 32. All these comparisons are between men and women who did not have children by age 32. Despite the

discouraging pattern of earnings differentials, a higher percentage of women than men found their education relevant to their work, and, among bachelor's degree holders, more women than men came to work "a great deal" with ideas, the engine of an information economy. Women also took a more positive attitude than did men toward working conditions, relationships on the job, and new skills development. They were, in short, more enthusiastic and potentially productive workplace participants at the same time they were under-rewarded. The study concludes that both women's knowledge and their willingness to share that knowledge in the workplace is critical to the nation's future and should be rewarded so that all may benefit.

A lengthy list of references and 23 tables of data compiled from the surveys and PETS files are included at the end of this report. A second edition of this monograph, including minor revisions in two tables, was published in July 1992.

See Gender and Racial-Ethnic Differences

121

Adelman, Clifford. 1990. Light and Shadows on College Athletes. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

Using the NLS-72 base year through 1986 follow-up surveys and the NLS/PETS data, the author examines the long-term educational and labor market careers of college varsity athletes. The varsity group, made up of football and basketball only (n=134), was compared to 5 other groups: varsity athletes in sports other than football and basketball (n=92), performing arts students (n=310), intramural sports participants (n=629), nonathletes (n=2,400), and everybody else (n=4,535). All groups were drawn from the PETS sample, and all groups attended college in patterns dominated by 4-year schools.

Major findings include:

(1) Compared with other groups, varsity football and basketball players enter college with relatively poor high school records and test scores and the highest ratio of vocational to academic subjects in high school, yet graduate from college at only a slightly lower rate.

(2) The principal reasons for the outcome mentioned above are that varsity football and basketball players (a) are more likely than students in other groups to receive scholarships and (b) are more likely to enter college directly from high school. They also appear to have access to a "safety net" that is not available to other students.

(3) Those varsity football and basketball players who graduate take longer to do so than nonathletes, earn lower grades, and pursue less demanding curricula.

(4) Varsity football and basketball players earned one out of every seven credits in a de facto sports curriculum. Compared with the other groups, these students were more likely to have taken remedial and introductory courses, personal service and development courses, and vocational courses in trades and office support.

(5) By age 32, ex-varsity football and basketball players had the highest rate of home ownership and the lowest rate of unemployment of all groups, along with earnings 10 percent above the mean for all former 4-year college students.

(6) Former varsity football and basketball players were the least likely of any group to claim that their higher education was relevant to their work, were the least likely to work with ideas "a great deal," and were the most likely to have lower status occupations at age 32 than they had aspired to at age 19.

122

Adelman, Clifford. 1988. "Transfer Rates and the Going Mythologies." *Change* (January/February): 38-41.

For description see entry #90.

See **Patterns of Attendance**

123

Alexander, Karl L., Riordan, Cornelius, Fennessey, James, and Pallas, Aaron M. 1982. "Social Background, Academic Resources, and College Graduation: Recent Evidence from the National Longitudinal Survey." *American Journal of Education* 90: 315-333.

This study examines the effects of social background factors (race, gender, and SES) and academic resources (standardized test scores, class rank, and curriculum) at the time of secondary school graduation on rates of completion of baccalaureate degrees. Data were drawn from the base year through the 1979 follow-up surveys of the NLS-72 (n=1,916 whites and 1,204 blacks).

Findings indicate that "opportunities for completing college, given that one has already completed high school, are influenced primarily by individual academic merit and that social background handicaps are less than might have been anticipated." Results show virtually no differences in rates of degree completion between males and females, slight differences by race (blacks, generally, having higher rates of degree completion) and notable differences by SES. Academic characteristics, however, appear to be the strongest predictors of degree completion.

124

Anderson, Kristine L. 1988. "The Impact of Colleges and the Involvement of Male and Female Students." *Sociology of Education* 61 (July): 160-177.

This study focuses on the structural and organizational determinants of educational attainment and reviews research and theoretical models of determinants of educational careers of college entrants, including social and academic backgrounds, college characteristics, and students' roles and experiences after they enter college. Using the "Base Year" and "First" and "Fourth Follow-Up" surveys of the NLS-72, the author draws upon Tinto's (1975) status attainment models and integrates the determinants into a causal model in order to examine their combined influences on men and women.

Results indicate the continuing effects of SES, aptitude, high school preparation, goal commitment, student role involvement, gender differences, and achievement in college. High school grades are a strong predictor of college grades and the degree of student role involvement. Findings also illustrate the importance of institutional cohesiveness, the negative effect of institutional integration on women's college grades and the strong support for the importance of students' involvement in the student role. For both men and women, goal commitment is a more important determinant of attainment than institutional integration or commitment.

See Gender and Racial-Ethnic Differences

125

Anderson, Kristine L. 1984. The Effect of College Type and Characteristics on Educational Attainment. Washington, DC: U.S. Department of Education, National Institute of Education. ED 256 206

For description see entry #70.

See College/Program Effect

126

Anderson, Kristine L. 1984. Institutional Differences in College Effects. Final Report. Washington, DC: U.S. Department of Education, National Institute of Education. ED 256 204

Participants in the NLS-72 who entered an academic program by fall 1974 are used in analyses to determine the impacts of type of postsecondary institution attended on educational attainment,

achievement goals, and occupational attainment net of relevant individual predictors (such as social status, academic preparation and early goal levels). Individual survey data on the higher education institutions attended by participants were merged with the NLS data. Institutional data include control (public versus private), level (university, 4- or 2-year school), gender and ethnic composition, percentage of students at the graduate level, percentage of vocational major areas, percentage of campus residents and part-time students, enrollment size, expenditures per student, and tuition and fees.

Findings show a wide range of educational outcomes by institution type, although this may be attributed to differences in the students attending those institutions. In general, however, more academically selective, smaller, less vocationally oriented colleges with higher levels of structural integration exhibit positive effects on student attainment. Two-year institutions had the most negative effects on educational attainment.

127

Anderson, Kristine L. 1984. College Effects on the Educational Attainment of Males and Females. Washington, DC: U.S. Department of Education, National Institute of Education. ED 256 205

For description see entry #71.

See College/Program Effects

128

Burkheimer, Graham J., and Jaffe, Jay. 1981. "Highly Able Students Who Did Not Go To College." Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 212 682

For description see entry #91.

See Patterns of Attendance

129

Dawkins, Marvin P. 1986. "A Longitudinal Analysis of Variations in Mobility Goals Across Race-Sex Groups." Western Journal of Black Studies 10(1): 34-43.

The study examines race and sex differences in the stability of mobility goals over a 7-year period following high school graduation and also assesses the impact of race, sex, social class and academic ability on 1979 mobility goals. The data are drawn from the NLS-72 "Base Year" survey and "Fourth Follow-Up," and include a sample of 3,333 whites and 3,119 blacks. Mobility goals are defined by variables "reflecting progress toward occupational attainment" (such as satisfaction with progress toward achieving expectations). Academic ability is based on results of the academic aptitude test scores administered to respondents in the "Base Year" survey.

Findings indicate consistent sex differences in occupational expectations. Males more frequently named professional, crafts, technical and managerial/administrator categories while females indicated expectancies for professional, clerical, homemaker and school teacher roles. Regarding race, blacks had lower levels of educational attainment 7 years out of high school and generally were more dissatisfied than whites with their progress toward attainment of occupational goals. With the addition of social class background and academic ability in the analysis of race and sex effects on mobility goals, findings point to the relatively strong impact of race both independently and in interaction with other factors. Sex does not have a significant impact on indicators of mobility but does interact with race to affect satisfaction with career progress. These results provide further evidence showing that race and sex remain important factors in the development of mobility goals and in the process of career socialization.

See Gender and Racial-Ethnic Differences

130

Daymont, Thomas N., and Andrisani, Paul J. 1984. "Job Preferences, College Major and the Gender Gap in Earnings." Journal of Human Resources 19(3): 408-427.

This report analyzes gender differences in earnings among recent college graduates. The authors hypothesize that differences in preferences or tastes, and in preparation for various types of work

measured prior to entering the labor market, explain much of the earnings gap between recent male and female college graduates.

Data from the NLS-72 base year through 1979 follow-up surveys are used to distinguish between the effects of differences before and outside the labor market and differences within the labor market. Results indicate that preferences in occupational roles and in choice of college major are different for men and women. These two differences account for approximately 1/3 to 2/3 of the gender gap in hourly earnings 3 years after college graduation. Although similar studies interpret the unexplained portion of the gender gap in earnings as due to labor market discrimination, the authors suggest that the results may be over or underestimations due to selectivity, "the chilling effect of past discrimination," comparable worth-type issues, and other omitted variables.

See Gender and Racial-Ethnic Differences

131

Dunkelberger, John E. 1984. S-114, Defining and Achieving Life Goals: A Process of Human Resource Development. Termination of Report of Co-operative Regional Project. ED 242 450

Project S-114 (1977-1983) consisted of three objectives which dealt with rural Southern youth and which focused on educational and occupational aspirations and attainment results for males and females, blacks and whites. Each objective involved using a distinct dataset. In 1979, Objective 1 was completed—the fourth wave of a longitudinal panel study begun in 1966 was carried out by interviewing almost 1,000 young adults (then about 30 years old) raised in rural areas of six Southern states. Data were analyzed in areas such as education, occupation, residence and family. Objective 2 was modified and ultimately used in the National Longitudinal Study data for a wide variety of special analyses. Objective 3 involved the analysis of a survey which was mailed to almost 3,300 agriculture students.

Objective 2, which used NLS-72, specifically examined several factors related to occupational attainment, such as patterns of both educational and

occupational goals, and the movement of women into traditionally male occupations. (Adapted from ERIC abstract)

132

Eagle, Eva and Carroll, C. Dennis. 1988. Postsecondary Enrollment, Persistence, and Attainment for 1972, 1980, and 1982 High School Graduates. High School and Beyond National Longitudinal Study. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 304 036

For description see entry #93.

See Patterns of Attendance

133

Eckland, Bruce K., and Henderson, Louise B. 1981. "College Attainment Four Years After High School." Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 215 643

This report focuses on those NLS-72 respondents who went to college, dropped out, returned, and graduated on schedule. Special attention is given to both students entering 2- and 4-year colleges and part-time students. The report also looks at the influence of SES, gender, and race-ethnicity on the college attainment process. Differences in outcome by type of student, SES, race, sex, and ability were examined for each point in the college attainment process. Data were taken from the base year and the first three follow-up surveys of NLS-72 (1972-76).

Findings indicate that students attending 2-year schools are less likely to graduate with a BA on schedule. Also, the difference in graduation rates between 2- and 4-year schools was nearly the same for each SES and ethnic group. SES had a significant impact at almost every stage of the education cycle, even when ability was controlled for. SES appears to influence full- or part-time status, persistence, and return to college.

Effects of race on the college attainment process were mixed. Some findings related to race include: more blacks than whites delayed entering

college, blacks were equally likely as whites to return to college if they dropped out, and more whites than blacks attended 2-year schools. A very significant finding regarding race was the reversal of black disadvantage when ability was controlled for.

134

Epps, Edgar G., and Jackson, Kenneth W. 1985. Educational and Occupational Aspirations and Early Attainment of Black Males and Females. Atlanta, GA: Southern Education Foundation. ED 263 818

Using a modified version of the Wisconsin model of status attainment, the authors try to ascertain specific mechanisms which generate status (defined here as occupational and educational attainment) among African-Americans. Data from the NLS-72 "Base Year" and "1979 Follow-Up," and High School and Beyond 1980 "Base Year" survey and "First Follow-Up" are used in the analysis. The Wisconsin model stresses social-psychological influences. The authors, however, feel that models such as this are ineffective for explaining the attainment of black students because of inadequate measures of the school dimension.

Findings suggest that, for black students, aspirations may be a more significant factor for educational attainment than measured achievement. They also show the strong influence of school factors on status attainment processes for both black males and females. While findings provide a general pattern of educational attainment, the authors believe that a model combining background, social-psychological, and school factors was insufficient for understanding occupational attainment for black students. The authors suggest the possibility that factors such as discrimination and structure of opportunity may be missing from the model.

See Gender and Racial-Ethnic Differences

135

Furr, Jane D. 1980. "The Relationship of High School Reading and Mathematics Achievement and Employment Experiences: Implications for Minimal Competency Testing." Paper presented at the Annual Meeting of the National Council on

Measurement in Education, Boston, MA, April 8-10. ED 187 737

This study uses the NLS-72 ("Second Follow-Up" survey) to examine data regarding the relationship between reading and math achievement, and employee experience variables (work experiences, occupational category, job satisfaction, income, and steadiness of employment). The sample consists of respondents who were of average and below average achievement.

Findings indicate that there is little relationship between high school reading and math achievement levels and employee experience variables. The author suggests that further research is necessary in this area to ensure that appropriate, minimal competency objectives are set to prevent labeling people as incompetent "on the basis of the examination of tasks which bear little relationship to life experiences."

136

Gerstein, Marti, Lichtman, Marilyn, and Barokas, Judy U. 1988. "Occupational Plans of Adolescent Women Compared to Men: A Cross-Sectional Examination." *The Career Development Quarterly* 36 (March): 223-230.

The central purpose of the study is to examine shifts in the occupational plans of adolescent women compared with those of men, using data from the NLS-72 and High School and Beyond. The trend of entering into high-status and exiting low-status major occupational categories is examined, and entry into "male-dominant" and exit from "female-dominant" occupations is compared.

Results indicate a slight shift in occupational plans for women, although many still planned to enter traditionally female fields. Data suggest that, in general, many occupational categories will remain dominated by a single sex. The authors include implications and suggestions for individuals providing career counseling for students, such as offering current educational/occupational information and specific labor market data, and facilitating student goal achievement through psychological encouragement.

See Gender and Racial-Ethnic Differences

137

Gordon, Howard R.D. 1985. "Analysis of the Post-secondary Educational Attainment of Agricultural Education Graduates of the High School Class of 1972." *Journal of Vocational Education Research* 10(2): 11-18.

This study examines the effects of participation in agricultural education in high school on subsequent postsecondary educational attainment. Specifically, the author seeks to determine the degree of association between the number of semesters in agricultural education taken at the secondary level and the number taken at the postsecondary level. Also, possible differences in postsecondary attainment among agriculture graduates (four or more semesters completed), semi-agriculture graduates (one to three semesters completed), and nonagriculture education graduates (zero semesters completed) is examined.

Four main findings are:

(1) Agricultural education graduates participated less frequently in postsecondary programs than either semi-agricultural or nonagricultural education graduates.

(2) When the differences in postsecondary participation for each group are subjected to multiple regression analysis, using selected demographic and personal data as predictor variables, the differences based on participation in agricultural education all but disappear.

(3) When evaluating program results in terms of subsequent achievement of graduates, effects of background variables must be taken into account.

(4) More emphasis should be placed on counseling students to consider continuing their education beyond high school and on providing agricultural education students with information regarding postsecondary opportunities in their areas of study.

138

Gordon, Howard R.D., and Camp, William G. 1984. "Analysis of the Occupational Attainment of Agricultural Education Graduates of the High School Class 1972." Paper presented at the National Agricultural Education Research Meetings, New Orleans, LA, December. ED 259 109

The purposes of this study are (1) to determine the differences in the job status attainment among agricultural education (four or more semesters completed), semi-agricultural education (one to three semesters completed), and nonagricultural education high school students who were employed in agricultural occupations for each year from 1972 to 1979, taking varying backgrounds into account; and (2) to ascertain differences, still controlling for background, in job status attainment for agricultural education, semi-agricultural education and nonagricultural education high school students. A sample of 6,585 respondents from the NLS-72 are used in the analysis. The authors use the Duncan scale score, an indirectly derived continuous variable, as a measure of socioeconomic attainment.

Initial analyses reveal that participation in agricultural education has negative effects on the status of graduates for 3 of the 7 reported years. When background variables are controlled for, however, results change dramatically. The authors concluded that "agricultural education program evaluations are too complex to be addressed adequately by such simplistic analyses as the straightforward examination of graduate incomes or placement records." They also conclude that participation in agricultural education training in high school had relatively neutral effects on the future job status attainment of graduates in either agricultural or nonagricultural careers.

139

Grubb, W. Norton. 1989. The Causes and Consequences of Enrollments in Higher Education: Evidence From the National Longitudinal Study of the Class of 1972. Final Report. Berkeley, CA: Institute for the Study of Family, Work, and Community. ED 318 371

The purpose of this study is to examine the probability of enrolling in postsecondary education, the likelihood of completing various types of credentials, and the impact of those credentials (including course credits earned by those who do not complete credentials) on wage rates, earnings and on other educational and noneducational adult outcomes. Data were drawn from the NLS-72 base year through fifth (1986) follow-up surveys and the Postsecondary Education Transcript file.

The first chapter provides an overview of both enrollments in and completion of postsecondary education by institution type and for different groups of students. Results are based on both the NLS-72 data and comparable data from High School and Beyond. The second chapter expands upon enrollment patterns described in chapter one and presents a multivariate analysis of the causes of enrollment. The third chapter presents results from the analyses of wage rates, earnings and other adult outcomes. The effects of field of study on outcomes and the receipt of credentials from different kinds of postsecondary institutions is also examined. The final chapter provides an explanation of the results.

Findings indicate that several forms of postsecondary education fail to increase either wage rates or earnings. Results also show significant differences between BA degrees and all other forms of postsecondary attainment in terms of benefits received (e.g., economic returns). Other findings show an increase in the tendency to drop out of postsecondary education for groups frequently viewed as at risk of failure in the labor market (minorities, low SES, and those with poor academic records in high school) and an increase in the rate at which adults are enrolling in higher education (although difficulty exists in detecting either economic or noneconomic benefits).

140

Grubb, W. Norton. 1989. Access, Achievement, Completion, and "Milling Around" in Postsecondary Vocational Education. Washington, DC: U.S. Department of Education, National Assessment of Vocational Education. ED 315 548

The author looks at student behavior at the postsecondary level in terms of degree completion, dropout and "milling around" (frequently switching major area of study). The research is in response to increased access to higher education of minority students and to implications for completion and occupational attainment. Postsecondary vocational students attending community colleges, technical institutes and private vocational schools are highlighted. Data are taken from the NLS-72 and the HS&B 1980 cohort. Data are used to examine initial enrollments in higher education; fields of study in postsecondary education; progress through institutions of higher education and the tendency to drop out; completion of credentials; the special problems of minority students; the nature of transfers among institutions; course enrollments and credits earned by noncompleters; late entrants into higher education, and employment during postsecondary education. Data are also used to compare postsecondary vocational institutions and vocational students in postsecondary education.

Findings indicate an expansion of postsecondary vocational education, especially in community colleges, but a substantial number of students fail to complete a program. The author cautions that interpretation of these results is difficult because of several questions concerning the motivation behind student behavior: (1) How many students are really dropouts? (2) How many are completers in terms of their own goals? and (3) How many are experimenters?

See Vocational Technical and Vocational Educational

141

Hill, Susan, and Owings, Maria. 1986. Completion Time for Bachelor's Degrees. Washington, DC: U.S. Department of Education, Center for Education Statistics. ED 276 376

This report compares bachelor degree recipients who began college by the fall of 1972 and earned degrees within 4 years (traditional pattern), with recipients who either (1) took longer than 4 years to graduate, (2) began college later than the fall

after high school graduation, or (3) both. The influence of aptitude, test composite score, high school curriculum (academic, general or vocational), SES, and region of high school (Northeast, North Central, South, or West) were examined for a sample of NLS-72 students who received bachelor's degrees by December 1984 (n=4,440). The data came from the first public release (uncleaned) PETS files.

Women were more likely to follow the traditional pattern of degree attainment. Those who scored in the highest quartile of the NLS aptitude test, who took a college preparatory curriculum in high school, who came from the Northeast, and who were of high SES also tended to follow the traditional pattern. In addition, students majoring in social sciences, science, and mathematics generally followed the traditional pattern.

Of those who received their degree later than 4 years after high school graduation, 70 percent started by the fall after high school but took longer than 4 years to finish. Delayed entrants (those waiting until 3 or 4 years later) were equally likely as those entering immediately after high school to earn their degree within 4 academic years.

142

Hilton, Thomas L., and Schrader, William B. 1987. Pathways to Graduate School: An Empirical Study Based on National Longitudinal Data. Princeton, NJ: GRE Board Research Report No. 82-21R ETS/Research Report 87-41.

For description see entry #99.

See Patterns of Attendance

143

Horn, Laura, and Carroll, C. Dennis. 1989. Enrollment, Completion, Attrition, and Vocational Course-Taking Patterns in Postsecondary Education: A Comparison of 1972 and 1980 High School Graduates Entering 2-Year Institutions, High School and Beyond, National Longitudinal Study of 1972. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 309 820

This report compares the postsecondary educational experiences of students who entered a 2-year institution the summer or fall after high school graduation. The Postsecondary Educational Transcript file of the NLS-72 and High School and Beyond 1980 seniors are used to compare students on the basis of enrollment, completion (defined in relation to degree attainment), dropout rates and vocational course-taking patterns by gender, SES, racial-ethnic groups, and parental education.

Major findings include:

(1) Rates of enrollment in 2-year institutions immediately after high school graduation were higher in 1980 than 1972. This was true regardless of sex, race-ethnicity, or parental education. Enrollment rates were also higher for students of low and middle socioeconomic status.

(2) Hispanic students enrolled in 2-year institutions at higher rates than black students in 1972 and at higher rates than either black students or white students in 1980. Black students enrolled at lower rates than white students in 1972 but had approximately the same rates as white students in 1980.

(3) Males, white students, students whose parent(s) had a bachelor's degree or higher, and high SES students of the 1980 cohort had lower rates of degree completion than in the 1972 cohort. Conversely, Hispanic students from the 1980 cohort had higher completion rates than those in the 1972 cohort.

(4) White students had higher completion rates than either black students or Hispanic students in the 1972 cohort. In the 1980 cohort, white and Hispanic students had approximately equal completion rates and both were greater than black student completion rates.

(5) Dropout rates were higher in the 1980 cohort than in the 1972 cohort regardless of sex, socioeconomic status, or parental education. Only Hispanic students had no decline in dropout rates between the two cohorts.

(6) Approximately equal proportions, regardless of sex, race-ethnicity, parental education or SES, of students entered vocational programs in 1972 and 1980.

(7) Overall, no decline in degree completion for vocational students between the 1972 and 1980 cohorts existed, regardless of sex, race-ethnicity, parental education or SES.

See Vocational Technical and Vocational Education

144

Knepper, Paula R. 1990. Trends in Postsecondary Credit Production, 1972 and 1980 High School Graduates. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

This study examines differences between the high school graduating classes of 1972 and 1980 in terms of their postsecondary progress and completion. Data are drawn from the NLS-72 and HS&B 1980 senior cohort. The "Base Year" survey and PETS are used for each cohort. Because of time constraints with the 1980 PETS data, only the first 4 1/2 years of the 1972 PETS data are included.

Some of the main findings include:

(1) While almost a third (31 percent) of the 1972 cohort who entered postsecondary education right out of high school completed a bachelor's degree within the 4 1/2-year period, less than a quarter (22 percent) of the 1980 cohort did so in the same length of time.

(2) Overall, baccalaureate degree completion in 4 1/2 years for the 1980 cohort dropped about 10 percentage points below that of the 1972 cohort. This same 10 percentage point drop was evident for all groups, regardless of race, sex, or socioeconomic status (SES). By sex, men dropped from 30 to 21 percent, and women dropped from 33 to 22 percent. By race, whites dropped from 33 to 24 percent, blacks dropped from 22 to 11 percent, and other minorities dropped from 20 to 12 percent. By SES,

those in the lowest group dropped from 21 percent to 11 percent, those in the middle dropped from 27 to 19 percent, and those in the highest group dropped from 40 to 30 percent.

(3) Almost 10 percent more persons in the 1980 cohort than in the 1972 cohort took longer than 9 months to complete the freshman year (67 percent, up from 58 percent).

(4) For those who finished the BA, 11 percent more in the 1980 cohort than in the 1972 cohort finished within 45 months (84 percent, up from 73 percent).

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Knepper, Paula R. 1989. Student Progress in College: NLS-72 Postsecondary Education Transcript Study, 1984. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 309 710

This study examines the average amount of time taken to complete each level of postsecondary education, including the BA, the number of students who take longer than the expected time to advance, and goal attainment. These issues are examined in terms of sex, race, and SES and their relationship to persistence and progress. Data were taken from the NLS-72 and PETS for students who had at least one transcript.

Some main findings include:

(1) Over 40 percent of the NLS-72 seniors earned a BA degree within 12 years after high school.

(2) In general, more than half of all BA completers took longer than the expected 45 months to finish.

(3) Men were more likely to take longer at each level than women.

(4) Type of postsecondary institution attended was related to completion time. For example, students who attended 4- year private colleges had a 33

percent greater likelihood of completing the BA on time compared to students who entered similar public colleges.

(5) Transfer between schools usually resulted in longer completion time.

146

Lichtman, Marilyn, and Rothschild, Susan J.S. 1982. "Career and Education Patterns of Rural Women." Paper prepared for presentation at the Annual Meeting of the American Educational Research Association, New York, NY, March 19-23. ED 214 725

This study uses the base year through 1979 follow-up surveys of the NLS-72 to examine the effects of geographic location (rural, in this case) on womens' status attainment. This study compares the educational and occupational expectations and attainments of those who went to high school in rural areas and remained following high school with the expectations and attainments of those who were educated in rural areas but moved to other types of communities following high school.

Findings show strong evidence that rural residence after high school graduation is a significant element in the educational and occupational patterns of women. Women residing in rural areas have lower educational aspirations and are less likely to work outside the home after high school. Actual attainment, however, is low for both groups.

147

Lyson, Thomas A. 1986. "Migration Selectivity and Early Adult Attainments." Rural Sociology 51(3): 328-342.

This study examines two interrelated issues: (1) the relationship between background characteristics and personal attributes, and the decision to migrate to or from a rural area; and (2) how the decision to move from, into or remain in a rural area relates to early adult social and economic attainments. Six populations (rural nonmigrants, rural-to-rural migrants, rural-to-urban migrants, urban nonmigrants, urban-to-urban migrants, and urban-to-rural migrants) were drawn from the NLS-72 "Base Year" and subsequent follow-ups. Discrimi-

nant analysis measured the extent of differences among the six groups.

Findings related to the first question show that, for men, the biggest distinction in background characteristics among the six groups was farming. Plans to farm played an important part in the decision to migrate. For women, a farm background was important in characterizing rural-reared and urban-reared persons, although a larger proportion of women with farm backgrounds migrated to urban areas. Findings related to the second question indicate significantly different patterns of early adult social and economic attainment. These findings show that "a rural or urban context can be seen as a set of parameters through which and by which career plans are shaped, molded, and eventually crystallized... researchers, therefore, must account for the effects of variations in situational circumstances on the hypotheses, models, and theories being tested."

148

McClelland, Katherine. 1990. "Cumulative Disadvantage Among the Highly Ambitious." *Sociology of Education* 63: 102-121.

This study examines the early educational attainments and changes in career expectations of a sub-sample of respondents to the NLS-72. The base year and first through fourth follow-up surveys are used in analysis. Using Bourdieu and colleagues' theories of "cumulative disadvantage," the author shows, after controlling for differences in measured academic ability, that men and those from upper-white-collar homes are more likely to survive the 7-year period following high school on track and to achieve their initial goals. Results also indicate that, for women and those from nonprivileged backgrounds, marriage is an especially strong transmitter of cumulative disadvantage while attendance at an elite college or university is beneficial to all.

149

Mertens, Donna M., and Gardner, John A. 1982. *Educational and Employment Experiences of the Younger Adult Worker*. Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education. ED 215 210

Three large-scale surveys were used to examine the effects of vocational education on educational and occupational attainment: the Younger Adult Worker (YAW), the 1966-78 National Longitudinal Surveys of Labor Market Experiences for Young Men and Young Women and the NLS-72.

The study's results strongly indicated sex stereotyping in both enrollment in vocational programs and subsequent employment. The findings also provide strong evidence that participating in marketing education programs in high school resulted in higher earnings for men. Participation in business, health, home economics or agricultural programs were associated with lower earnings. Women who took trade or business curriculum had higher earnings. Postsecondary vocational education is associated with higher earnings for both men and women.

In general, completing a vocational curriculum in high school was negatively associated with completing traditional postsecondary education. However, completing a vocational curriculum was positively related to completion of nontraditional postsecondary education such as apprenticeship training or employer-sponsored training.

See Vocational Technical and Vocational Education

150

Powell, Brian, and Steelman, Lala Carr. 1990. "Beyond Sibship Size: Sibling Density, Sex Composition, and Educational Outcomes." *Social Forces* 69(1): 181-206.

This paper looks at the effects of sibling density (number of siblings within specific time intervals) and sex composition of the sibship (number of brothers and sisters) on academic performance. Data are from the "Base Year" and "First Follow-Up" of HS&B and the "Base Year" survey of the NLS-72.

Several findings—positive associations among family income, parental educational level, race and educational performance—coincide with the results from previous studies of siblings. The

authors found high sibling density associated with lower test performance, with math scores being more affected than verbal scores. Sex composition effects indicate that having sisters is less damaging to classroom performance than having brothers is, although sex composition of the sibship has no significant effect on standardized test scores.

See Marriage/Family

151

Robertshaw, Dianne, and Wolfle, Lee M. 1980. "Discontinuities in Schooling and Educational Attainment." Paper presented at the Annual Meeting of the American Educational Research Association, Boston, MA, April 7-11. ED 186 488

For description see entry #102.

See Patterns of Attendance

152

Robertshaw, Dianne, and Wolfle, Lee M. 1983. "Discontinuities in Schooling and Educational Attainment." Higher Education 12: 1-18.

For description see entry #103.

See Patterns of Attendance

153

Rothschild, Susan J.S., and Lichtman, Marilyn. 1980. Factors Related to White, Black, and Hispanic Women's Mathematics Attainments: A Descriptive Study. ED 195 570

The study examines the relationship between family background, high school experience, self-concept, and significant others' perceived influence on college plans, expectations (educational and professional), expected college major, college mathematics experience, sex-role orientation, family status, and the study of mathematics for black, white and Hispanic women. Data are drawn from the base year through 1976 follow-up surveys of the NLS-72 with samples sizes as follows: n=6,384 white women, n=1,193 black women and n=384 Hispanic women.

Findings show educational expectations and number of semesters of high school math to be influential for all three groups examined. Black and white women showed similar correlation patterns in that neither background characteristics, marriage, self-concept, sex-role orientation nor significant others' perceptions on college plans exhibited strong effects on the study of math. The children/family status variable had a significant, negative relationship to the study of math for Hispanic women, while educational expectations, number of semesters in math and high school program were highly related to the study of math. The self-concept measures and sex-role orientation showed a slight relationship to the study of math. Hispanic women were also the only group for which background variables, specifically fathers' education, showed any effects on the study of math.

See Gender and Racial-Ethnic Differences

154

Seyfarth, John T., and Ranson, James T. 1989. "Occupational Stayers and Strayers: Career and Salary Experiences of Current and Former Teachers." Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, March 27-31. ED 314 817

This study utilizes data from the "Fifth Follow-Up" of the NLS-72 to better understand career decisions of teachers. The following four questions are examined:

- (1) In what occupations were respondents to the 1986 survey found?
- (2) How many persons from the cohort who became elementary or secondary teachers later took jobs in other fields, and what occupations did they choose?
- (3) How many persons who initially entered other occupations subsequently took teaching jobs in elementary and secondary schools, and what occupations did they leave in order to teach?
- (4) How did the salary experiences of persons who remained in elementary and secondary teaching

compare with the experiences of those who never taught, those who left teaching for other occupations, and those who entered teaching from other occupations?

Findings show that 60 percent of the sample of those who ever taught were teaching in 1986. Those who left teaching for other jobs tended to receive higher salaries. Those who persisted in their first occupational choice tended to have higher salaries than job changers. Those who left teaching tended to choose sales, clerical or managerial jobs. Three-fourths of those switching to teaching came from the professional/technical, managerial/administrative, sales, or clerical fields.

See Teachers

155

Sharp, Laure M., and Weidman, John C. 1989. "Early Careers of Undergraduate Humanities Majors." *Journal of Higher Education* 60(5): 544-564.

For description see entry #79.

See College/Program Effects

156

Sharp, Laure M., and Weidman, John C. 1986. *Early Career Patterns of Undergraduate Majors in the Humanities*. Research Report No. 1. Pittsburgh, PA: School of Education, University of Pittsburgh. ED 274 258

For description see entry #80.

See College/Program Effects

157

Smart, John C., and others. 1985. "Self-Concept and Career Orientation Developmental Patterns During the College Years." Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL, March 31-April 4. ED 261 620

The purposes of the study are (1) to determine the degree to which changes in adolescents' self-

concept and career attitudes are related to their level of involvement in postsecondary education, and (2) to describe the extent to which these relationships are consistent for males and females. The sample consists of 10,759 NLS-72 respondents with complete data on sex, 1972 family SES, postsecondary educational attainment level, self-concept, and career orientation. A comparison group of respondents with no exposure to postsecondary education is also included in the analyses.

"General self-image maturation pattern for all respondents indicated a consistent increase over the 7 years following high school. Those respondents with higher levels of involvement in postsecondary education had a more positive self-image at each of...5 time intervals. However, differences between the groups was greater in 1979 than initially in 1972, suggesting that exposure to the collegiate experience tended to reinforce and increase the more positive self-image held initially by college-bound youth. Exposure to postsecondary education experiences appears to have a strong relationship with the development of a more positive self-image, a modest relationship with enhancing self-confidence, but affects men and women differently in terms of their respective career orientation development. For women, a strong, positive relationship between level of postsecondary education attainment and career orientation scores exists, while for men the two are essentially unrelated."

158

Smart, John C., and Ethington, Corinna A. 1985. "Early Career Outcomes of Baccalaureate Recipients: A Study of Native 4-Year and Transfer 2-Year College Students." Paper presented at the Annual Meeting of the Association for the Study of Higher Education, Chicago, IL, March 15-17. ED 259 630

This paper examines conceivable differences in the job stability, status, and satisfaction of three groups of BA recipients with varying levels of attendance at 2-year colleges. The sample consists of 1,609 NLS-72 respondents who were BA recipients in 1976 with complete data on academic ability, family SES, intended occupational status, number of years employed between 1976 and 1987, gender,

number of years enrolled in a 2-year college, 1972-76 job stability, and job status.

Results "clearly suggest that potential short-term detrimental effects of 2-year college attendance, if they exist, are not immutable and that students are not forever disadvantaged by their initial decision to begin undergraduate schooling in 2-year colleges in terms of subsequent career behaviors."

159

Stone, James R. 1985. "Measuring Marketing Education's Impact on the Acquisition of Educational Credentials: A Creative Analysis." Journal of Vocational Education Research 10(4): 33-48.

This study investigates the net influence of several variables (background, vocational education participation, and school characteristics) on post-high school attainment of marketing education students. The author's model suggests that educational attainment for marketing education students is positively influenced by mother's education, race, gender, aptitude, participation in cooperative education, and educational aspirations. Data are taken from the "Fourth Follow-Up" of the NLS-72.

Results suggest that high ability nonwhites may be overrepresented in marketing education, that males tend to gain more education after high school than females, and that student participation in cooperative education has a significant negative impact on post-high school educational attainment. Participation in marketing education, however, has no influence on post-high school educational attainment.

As a result of these findings, the author recommends that research examine the impact of participation in vocational education programs on post-high school outcomes and include measures which are both program specific and treated as continuous variables. The author also suggests that those vocational education students who participate through a cooperative methods class (cooperative education) be encouraged to continue their post-high school activities.

160

Velez, William, and Javalgi, Rajshekhar G. 1987. "Two-Year to Four-Year College: The Likelihood of Transfer." American Journal of Education 96: 81-94.

This paper looks at the effects of several predictor variables on transfers from 2-year to 4-year colleges. Variables include those related to academic processes (GPA and high school track), psychosocial processes (influence of peers and friends), background characteristics (SES, ethnicity, religion), and institutional integration (participation in work-study, living on campus, fraternity or sorority membership). The sample includes those NLS-72 respondents enrolled in 2-year colleges in academic programs (approximately 1,407 students).

Results show that males have higher transfer rates. Other factors positively effecting transfer include having high SES, being Jewish, being in a college preparatory track in high school, being influenced by parents, and having high occupational and educational goals and high levels of institutional integration.

161

Wagenaar, Theodore C. 1984. Occupational Aspirations and Intended Field of Study in College. Oxford, OH: Miami University. ED 262 695

This study examines the selection and attainment of an occupation using data from the NLS-72 and High School and Beyond. Specific research issues include examining (1) changes which have occurred between 1972 and 1980 in seniors' occupational aspirations and intended field of study; (2) the success of seniors in attaining their occupational and field of study plans; and (3) factors related to the selection of an occupation and a field of study for the 1980 cohort.

General findings include:

(1) Decreased interest in teaching and an increased interest in managerial/proprietor occupations between 1972 and 1980. These were the most substantial changes during this time period.

(2) Increased interest in computer/engineering/architecture fields and decreased interest in educational fields were the most substantial changes in field of study choice between 1972 and 1980.

(3) Sex and educational aspirations were the most important factors in selecting an occupation.

(4) Sex, aptitude, educational aspirations, science coursework, and work values were the most important factors in selecting a field of study.

(5) Those selecting teaching, and education fields were less likely to be in the academic curriculum in 1980 than in 1972.

Policy implications for educators and federal officials are also included in this report.

162

Waite, Linda J., and others. 1986. The Effects of Parenthood on the Career Orientation and Job Characteristics of Young Adults. Bethesda, MD: National Institutes of Health, National Institute of Child Health and Human Development. ED 294 044

This study looks at several hypotheses about the relationship between becoming a parent, and job characteristics and career expectations of men and women. Specifically, the study asks:

(1) How do those who become parents differ from those who delay or forgo children before the first birth, in terms of expectations and achievements?

(2) Does parenthood change the work-related expectations and behaviors of young adult men and women?

Data for the study are taken from the NLS-72. Included are respondents for whom marital and parental status were known in 1976 and 1979. The universe included approximately 2,807 women and 2,477 men who were ever-married nonparents in 1979, and 3,350 women and 2,190 men who were ever-married parents by that year.

Results point to the existence of differences (even before the first birth) between men and women who became parents and those men and women who delayed having children. Those planning to be mothers, in general, are less career oriented, with greater numbers expecting to be homemakers. Prior to becoming pregnant, however, their occupational and social expectations are not low. After pregnancy, employment decreases dramatically for women and many indicate homemaking as their primary activity. The differences between soon-to-be fathers and other men is small in terms of work commitment, current occupational status, career expectations and hourly wages. In general, results show "a slight, early advantage for fathers in occupational status, followed by a reversal of this advantage during late pregnancy and the first 2 years of the child's life."

See Marriage/Family

163

West, Jerry. 1989. The Postsecondary Vocational Education of 1980 High School Seniors. The 2-Year Associate of Arts Degree. Survey Report. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 309 821

This report examines factors which differentiate between students who complete vocational Associate of Arts degrees and those who complete academic Associate of Arts degrees. Data from the Postsecondary Education Transcript files of high school seniors included in the High School and Beyond Study of the class of 1980 and the NLS-72 were used to study the characteristics of students who received an associate degree or certificate in a vocational education program within 4 years of high school graduation.

Main findings include:

(1) Only 12 percent of the HS&B graduates who attended any postsecondary institution completed a vocational degree or certificate program.

(2) Among the 1980 high school seniors who completed a postsecondary program within 4 years of high school graduation, vocational credentials

were earned at a rate four times that of academic degrees.

(3) High School and Beyond students completed vocational degrees at a higher rate than NLS students, but completed academic degrees at a lower rate.

(4) Most associate vocational degrees were completed at public 2-year colleges.

(5) The most popular field of study for vocational program graduates was business, followed by technical and engineering studies and health for associate degree recipients, and trade, industry, and health for certificate completers.

(6) Forty percent of all credits earned by vocational degree completers were in academic subjects.

(7) Students with certificates earned slightly more than half as many credits as students completing vocational degree programs.

(8) The postsecondary credit patterns for those who completed vocational certificate programs and for those who completed academic degree programs did not change much between the early-to-middle 1970s and the early-to-middle 1980s.

See Vocational Technical and Vocational Education

164

Wolfle, Lee M. 1985. "Postsecondary Educational Attainment Among Whites and Blacks." American Educational Research Journal 22(4): 501-525.

This study examines the existence of similarities and/or differences in the process of educational attainment for blacks and whites. The author first determined whether educational attainment was similar for blacks and whites and then examined the

extent and sources of educational inequality and how those inequalities were "expressed through intervening variables in the acquisition of postsecondary education attainment."

Data for the study are drawn from the base year through fourth follow-up of the NLS-72. The sample consists of 6,825 whites and 433 blacks who have complete information on the 13 variables included in the analysis. Major findings of the study include:

(1) The processes of educational attainment is the same for blacks and whites.

(2) The process of educational attainment depends modestly on social background.

(3) Ability is the most important determinant of placement in an academic program.

(4) To the same extent, curriculum differentiation in high school has a major impact on subsequent educational attainment for both blacks and whites.

See Gender and Racial-Ethnic Differences

165

Wolfle, Lee M., and Lichtman, Marilyn. 1981. Measurement Error Models of Educational Attainment for Whites and Mexican-Americans. Blacksburg, VA: Virginia Polytechnic Institute and State University. ED 207 905

This study begins with the premise that differences in educational attainment between whites and Mexican-Americans may be the result of either social or educational attainment processes. Data are drawn from the NLS-72 for a sample of white (average n=11,743) and Mexican-American (average n=493) respondents. The model of educational attainment used in the analysis is based on the idea that attainment is related to father's occupation and status, mother's education, number of siblings, sex, ability, academic preparation and college plans.

Results indicate that more similarities than differences exist between the groups and that the differences are relatively unimportant.

166

Adelman, Clifford. 1991. Women at Thirtysomething: Paradoxes of Attainment. Washington, DC:

U.S. Department of Education, Office of Educational Research and Improvement.

For description see entry #120.

See Attainment—Educational and Occupational

VIII. Gender and Racial-Ethnic Differences

167

Anderson, Kristine L. 1988. "The Impact of Colleges and the Involvement of Male and Female Students." Sociology of Education 61 (July): 160-177.

For description see entry #124.

See Attainment—Educational and Occupational

168

Anderson, Kristine L. 1984. Race Differences in the Effects of College Characteristics on Educational Attainment. Washington, DC: U.S. Department of Education, National Institute of Education. ED 256 249

For description see entry #69.

See College/Program Effects

169

Behuniak, Peter Jr., and Gable, Robert K. 1980. The Influence of Sex and College Major on Students' Attitudes About Future Employment and Satisfaction with College. Washington, DC: National Science Foundation. ED 191 417

A sample of 5,624 NLS-72 respondents who were undergraduate seniors in the areas of business, education, humanities, fine arts, physical and biological sciences, math, and the social sciences was used to examine sex-related differences in the relationship between student attitudes and choice of undergraduate major. The authors looked specifically at differences across majors in attitudes about future work and satisfaction with academic program, and the nature of the relationship between students' attitudes and their satisfaction with college.

Findings indicate that attitudes about future employment vary across majors and differ for men and women. Satisfaction with college appears to be related to attitudes about future work with gender as a moderating factor.

170

Dawkins, Marvin P. 1986. "A Longitudinal Analysis of Variations in Mobility Goals Across Race-Sex Groups." Western Journal of Black Studies 10(1): 34-43.

For description see entry #129.

See Attainment—Educational and Occupational

171

Daymont, Thomas N., and Andrisani, Paul J. 1984. "Job Preferences, College Major and the Gender Gap in Earnings." Journal of Human Resources 19(3): 408-427.

For description see entry #130.

See Attainment—Educational and Occupational

172

Epps, Edgar G., and Jackson, Kenneth W. 1985. Educational and Occupational Aspirations and Early Attainment of Black Males and Females. Atlanta, GA: Southern Education Foundation. ED 263 818

For description see entry #134.

See Attainment—Educational and Occupational

173

Gerstein, Marti, Lichtman, Marilyn, and Barokas, Judy U. 1988. "Occupational Plans of Adolescent Women Compared to Men: A Cross-Sectional Ex-

amination." Career Development Quarterly 36 (March): 223-230.

For description see entry #136.

See Attainment—Educational and Occupational

174

Gruber, James E. 1980. "Sources of Satisfaction Among Students in Postsecondary Education." American Journal of Education 88: 320-330.

Using a sample of 3,700 black and white male respondents to the NLS-72 who are either vocational/technical, junior college, or university students in October 1973, the author examines the effects of several variables on educational satisfaction. The author looks specifically at how these factors relate to educational satisfaction.

Findings indicate that self-esteem has a very strong influence for blacks, who had a greater self-esteem than whites. The type of school had no effect on satisfaction for white students and a small negative effect on satisfaction for black students. Overall, the best predictor of satisfaction for both white and black students was academic achievement.

175

Lyson, Thomas A. 1984. "Sex Differences in the Choice of a Male or Female Career Line. An Analysis of Background Characteristics and Work Values." Work and Occupations: An International Sociological Journal 11(2): 131-146.

This study examines a set of NLS-72 (base year through 1976 follow-up) respondents who selected either a predominantly male or a predominantly female major. The article summary is as follows:

Using data from the NLS-72, this article identifies similarities and differences in social background characteristics, academic ability, and work values among men and women in sex-atypical ma-

jors and sex-atypical curricula. The research was designed to examine two implicit assumptions in the literature about the choice of a sex-atypical major: (1) women in traditionally male areas manifest characteristics more closely associated with men in these same areas than with women in traditionally female areas; and (2) men in traditionally female curricula are more like women in these areas than they are like men in traditionally male areas. Results show that men and women in sex-atypical majors are more like their sex peers than like their curriculum mates. The implications of these findings for maintaining gender inequalities in the labor market are discussed.

176

Rothschild, Susan J.S., and Lichtman, Marilyn. 1980. Factors Related to White, Black, and Hispanic Women's Mathematics Attainments: A Descriptive Study. ED 195 570

For description see entry #153.

See Attainment—Educational and Occupational

177

Thomas, Gail E., and Gordon, Samuel A. 1983. Evaluating the Payoffs of College Investments for Black, White, and Hispanic Students. Report No. 344. Baltimore, MD: Johns Hopkins University, Center for Social Organization of Schools. ED 235 733

This paper examines the effects of college type and major on subsequent educational and occupational attainments of a sample of students who attended postsecondary educational institutions in 1972-73. The sample consisted of white, black, and Hispanic participants in the base year through fourth follow-up surveys of the NLS-72 who attended postsecondary institutions, including 2-year/vocational schools and 4-year schools, in 1972-73. Separate analyses are done by race, gender, and institution type for educational attainment and by race and gender for occupational attainment.

Findings of a preliminary analysis showed college type and major as having significant, positive effects on educational attainment while college type had a small but significant effect on occupational attainment. College major, grades, educational expectations, and high school grades all had significant effects on educational attainment for 4-year college students. College major did not have significant effects on educational attainment for any race or sex groups at 2-year colleges. Neither college type nor major had significant effects for ethnic groups or males. Educational attainment appeared to be the most important determinant of occupational attainment.

178

Wilder, Gita Z., and Powell, Kristin. 1989. Sex Differences in Test Performance: A Survey of the Literature. College Entrance Examination Board Report No. 98-3. ED 308 231

This report examines current data on sex differences in test performance and several of the hypotheses and evidence concerning possible causes of the differences. Topics covered include: examining differential performance of men and women on various tests; exploring various correlates and causes of the reported differences (such as biological, social, psychological, demographic, educational factors and test characteristics); and identifying areas for continuing and future research. Research covered in the report addresses undergraduate admissions tests, validity studies, national studies, verbal ability tests, quantitative ability tests, and voluntary testing programs. Specific testing programs discussed include NAEP, NLS-72, High School and Beyond and the SAT.

Data from both graduate and undergraduate admissions tests support the hypothesis that men are better at quantitative tasks, however, data does not support the hypothesis that women hold a consistent advantage over men on verbal tasks. Overall, findings indicate that differences between men and women are gradually diminishing. The topic, how-

ever, continues to be one of concern due to both the social consequences of differences in performance and the effects of test performance on motivation, attitudes and behaviors.

See Testing

179

Wolfe, Lee M. 1985. "Postsecondary Educational Attainment Among Whites and Blacks." American Educational Research Journal 22(4): 501-525.

For description see entry #164.

See Attainment—Educational and Occupational

180

Wolfe, Lee M. 1983. "Effects of Higher Education on Ability for Blacks and Whites." Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Canada, April 11-15. ED 230 148

This study examines the impact of college on knowledge of vocabulary and math as measured by scores from the "Fourth Follow-Up" of the NLS-72. Data are drawn from a sample of 1,738 whites and 451 blacks.

Findings indicate that the impact of college on both math and vocabulary is similar for whites and blacks and that postsecondary education, in general, increases performance in both vocabulary and mathematics. The best predictors of test scores were the scores of the same tests from high school, although correlations show that all predictor variables are positively related to vocabulary and math skills.

181

Yang, Shu-O W. 1981. "Rural-Urban Differences in Sex Role Orientations." Paper presented at the Annual Meeting of the Rural Sociological Society. Guelph, Ontario, Canada, August 19-23. ED 207 764

Data from NLS-72 are used to test two hypotheses: (1) rural young adults have more traditional sex-role orientations than do urban young adults; and (2) the rural-urban differentials in sex-role expectations will not be supported after controlling for major social characteristics which have effects on sex-role attitudes. The "Base Year" sur-

vey provides background information, and other data is taken from the "Third Follow-Up."

Data support the first hypothesis, but not the second, although the difference between urban and rural youth in sex-role orientations is relatively weak.

IX. Vocational Technical and Vocational Educational

182

Conroy, William G., Jr. 1980. "The Economic Effects of Vocational Education." VocEd 55(7): 39-41.

The author discusses the economic benefits of vocational education. Value is examined in terms of economic and social benefits. A section of the article looks at what various studies and databases, including the NLS-72, appear to say about the value of vocational education in terms of earnings differentials for students of different ability and by high school curriculum.

See Economics of Education

183

Grubb, W. Norton. 1989. Access, Achievement, Completion, and "Milling Around" in Postsecondary Vocational Education. Washington, DC: U.S. Department of Education, National Assessment of Vocational Education. ED 315 548

For description see entry #140.

See Attainment—Educational and Occupational

184

Gustman, Alan L., and Steinmeier, Thomas L. 1982. "The Relation Between Vocational Training in High School and Economic Outcomes." Industrial and Labor Relations Review 36(1): 73-87.

The two primary purposes of this study are (1) to determine whether enrollment alone in a vocational program had an impact on one of the labor market outputs; and (2) to determine whether the actual number of semester hours of vocational coursework taken had an impact on one of the labor market outputs (mean weekly earnings 3-4 years after high school, mean weeks employed, hourly wages). Data were drawn from the NLS Youth Survey (n=167 participants with 12 years of school and are 21 years old) and the NLS-72, "1976 Follow-Up" survey (n=2,405 participants). Respon-

dents enrolled in higher education or the military were excluded from the overall sample.

Findings show no significant differences between black or white male graduates of vocational programs and those in general programs in terms of outcome measures. NLS Youth data show, for white women, a significant, positive effect of business-commercial programs on weekly and annual earnings when compared to those earnings in general programs.

185

Horn, Laura, and Carroll, C. Dennis. 1989. Enrollment, Completion, Attrition, and Vocational Course-Taking Patterns in Postsecondary Education: A Comparison of 1972 and 1980 High School Graduates Entering 2-Year Institutions, High School and Beyond, National Longitudinal Study of 1972. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 309 820

For description see entry #143.

See Attainment—Educational and Occupational

186

Mertens, Donna M., and Gardner, John A. 1982. Educational and Employment Experiences of the Younger Adult Worker. Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education. ED 215 210

For description see entry #149.

See Attainment—Educational and Occupational

187

West, Jerry. 1989. The Postsecondary Vocational Education of 1980 High School Seniors, The 2-Year Associate of Arts Degree. Survey Report. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 309 821

For description see entry #163.

See Attainment—Educational and Occupational

188

Wiley, David, E., and Harnischfeger, Annegret. 1980. Curricular Resource Allocation and Course Exposure in Secondary Schools. Chicago, IL: M-L Group for Policy Studies in Education. ED 218 301

For description see entry #57.

See School/Program Effects

189

Woods, Elinor M. 1980. "National Longitudinal Studies and Data Sets." VocEd 55(7): 35-38.

This article reviews the effectiveness of several nationally representative longitudinal studies and datasets in examining the effects of vocational education. The five datasets are Project TALENT, Youth in Transition, the National Longitudinal Surveys of Labor Market Experience (NLS Youth), the NLS-72, and the National Longitudinal Survey of Young Americans (NLS New Youth Cohort). The author's two main conclusions were that no unique type of vocational education program exists and that vocational education students are much different than those who enroll in other programs (in terms of SES, ability level, and education after high school).

X. Teachers

190

Benton, Cynthia J. 1985. "Predicting Occupational Persistence: A Comparison of Teachers and Five Other Occupational Groups." Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL, March 31-April 4. ED 255 522

This study examines the effects of several variables in predicting occupational turnover in the 3-year period following postsecondary graduation. Teaching, nursing, social work, accounting, engineering and computer science are the six fields examined. Data are taken from the NLS-72 base year through fourth (1979) follow-up surveys.

Results show unequal distribution by gender with more women in teaching, nursing, and social work. Occupational turnover is lowest for nursing (15 percent) and highest for social service (74 percent). Turnover for the technical fields is between 39 percent and 54 percent; turnover for teaching is 35 percent. The author believes these figures reflect national norms of high job turnover early on in career development. In terms of persisters within a field, quality of life, needs, commitment, and expectancy are important predictors of persistence for teachers, who seem to be motivated by intrinsic rewards. Extrinsic factors, such as size of workplace, income, and job satisfaction are more important predictors of persistence in the other five fields.

191

Bethune, Stuart B. 1983. "Recruitment to Teaching During College: Results from the NLS." Paper presented at the Annual Meeting of the American Educational Research Association Montreal, Canada, April. ED 228 234

This study examines the effects of background characteristics and social-contextual influences on students' decisions to enter or leave undergraduate programs in teacher education. A comparison of student behavior in both similar (traditionally female) and dissimilar (traditionally male) fields is included. Specifically, patterns of movement be-

tween the freshman and senior year are observed. The sample includes 848 white, female respondents to the NLS-72, who began 2- or 4-year colleges in the fall following high school (1972) and remained continually enrolled through October 1976.

Results indicate that freshmen women choosing to major in education tended to be of lower ability, lower level of high school performance, lower SES; to have lower self-concept; to attend less selective colleges; and to come from rural areas. Ability, class background, and selectivity of college attended had the strongest, direct, negative effects on choosing education. Education majors were not much different from students in similar fields (home economics, health, and public services) in terms of ability, background, residence, self-concept, high school performance and selectivity of college attended. Those students leaving education most often chose fields in the social sciences. Those entering education after the freshman year came primarily from the humanities and fine arts fields.

192

Hafner, Anne, and Owings, Jeffrey. 1991. Careers in Teaching: Following Members of the High School Class of 1972 In and Out of Teaching. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 336 386

This study looks at career patterns of teachers or potential teachers in terms of their backgrounds, education, teaching qualifications and experiences, attitudes regarding teaching and job satisfaction. Variables which may predict retention in the field are also identified. A sample of 1,000 respondents to the "Fifth (1986) Follow-Up" of the NLS-72 who have ever taught elementary or secondary school or who were trained but never taught were used in the analysis.

Findings indicate that 55 percent of the sample taught for 10 consecutive years; 21 percent of the group never entered teaching while 37 percent left teaching within the first 5 years. A significant number of individuals moved in and out of teaching with

an average annual attrition rate of 7 percent. There is no evidence, however, of an increase in the number of teachers leaving the field. Variables which appear to be good indicators of retention are those measuring human capital. Number of years teaching, job satisfaction, teaching in a public school, number of continuing education activities and number of education credits also predict retention in the field.

193

Heyns, Barbara. 1988. "Educational Defectors: A First Look at Teacher Attrition in the NLS-72." Educational Researcher (April): 24-32.

This paper presents preliminary analysis, specifically focusing on issues of teacher attrition and retention, of the special supplement included in the "Fifth (1986) Follow-Up" of the NLS-72 for present or former teachers or for those who were trained to be teachers. Findings indicate that retention among teachers in the last decade has increased and that ability and qualifications of teachers have not declined over time. Based on the results of the study, the author makes three "fairly controversial claims":

(1) Teacher turnover is higher than levels of attrition suggest.

(2) Former teachers are quite similar to current teachers, except that they have typically been employed in school-work settings that may be above average. Also, patterns of entry and re-entry into the teaching profession may indicate erratic careers for the "best" teachers (as judged by their academic qualifications).

(3) Results of the study have implications for the direction of educational policies designed to enhance teacher professionalism or to link school reforms to the retention of teachers.

194

Lyson, Thomas A., and Falk, William W. 1984. "Recruitment to School Teaching: The Relation-

ship Between High School Plans and Early Adult Attainments." American Educational Research Journal 21(1): 181-193.

This study examines the nature of the relationship between teaching plans and actually becoming a teacher. Data from the NLS-72 base year through fourth follow-up surveys are divided into six analytic subgroups: (1) achievers—those planning to teach and who were teaching 7 years later; (2) defectors—those who reported teaching plans but held professional/managerial positions 7 years later; (3) dropouts—those expecting to become teachers but held nonprofessional/managerial jobs; (4) converts—those expecting to have professional managerial positions but ended up as teachers 7 years later; (5) climbers—those not reporting professional managerial occupational expectations but held teaching positions in 1979; and (6) professionals—those who did not hold teaching plans in 1972 but held nonteaching professional/managerial positions in 1979. Within these groups, the authors examine factors involved in plans to become a teacher, such as race, sex, residence, place, academic ability and social class origin.

Results show that almost half the teachers in the 1979 NLS sample had not reported teaching plans in 1972. Also, over three-fourths of those planning to enter teaching in 1972 were not teaching 7 years later, suggesting that occupational plans at age 17 or 18 may not be good predictors of early adult occupational attainment and also may reflect marketplace demands for teachers between 1972 and 1979. Because more than half of the respondents planned to be in a profession lower in prestige than teaching, the authors suggest, especially for women, nonwhites and those from rural areas, that teaching may be used as an "upward boundary of adolescent achievement."

195

Nelson, Howard F. 1985. "New Perspectives on the Teacher Quality Debate: Empirical Evidence from the NLS." Journal of Education Research 78(3): 133-140.

The study seeks to evaluate the academic ability of teachers due to concerns about the quality of teacher education and the decline in teacher quality. A total of eight aptitude measures were used to evaluate the academic ability of those who taught elementary and secondary schools between fall of 1976 and fall of 1979 (including SAT, H.S. rank percentile and the NLS-72 ability tests).

Principal findings indicate that (1) teachers employed in nonpublic schools have higher verbal test scores, with the loss of the most able teachers occurring primarily in the nonpublic sector; (2) while less than 3 1/2 percent of college graduates majoring in education come from the bottom quarter of their high school class, they are just as likely to find jobs as teachers and to get paid as much as other teachers; and (3) less than 25 percent of those who become teachers planned to major in education as high school seniors. "The latter finding, in particular suggests some public policy may be fallaciously guided by widely cited research based only on the study of prospective education majors among college-bound seniors."

These results have several implications regarding policies for improving teacher education and training. "First, reliance on the SAT for measuring ability, failure to weight survey data, and focusing on the test scores of college-bound high school seniors cause overestimation of the severity of the teacher quality problem. Second, this study provides evidence that the problem of retaining the best teachers may be overstated. Third, policies directed at improving the academic ability of new teachers would be more effectively focused on recruiting able

college students to teaching rather than on college entrance."

The author includes several limitations of this study such as the poor job market for teachers at this time, so the NLS-72 "data cannot effectively be used to determine whether or not the dim job prospects kept more of the bright students out of the profession and left only the most committed and able students to seek teaching careers, or caused education faculties to lower admissions standards."

196

Sebring, Penny, and others. 1987. The National Longitudinal Study of the High School Class of 1972 (NLS-72). "Fifth Follow-Up" (1986). Teaching Supplement. Data File User's Manual. U.S. Department of Education, National Center for Education Statistics. ED 292 891

For description see entry #17.

See Data File User's Manual

197

Seyfarth, John T., and Ranson, James T. 1989. "Occupational Stayers and Strayers: Career and Salary Experiences of Current and Former Teachers." Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, March 27-31. ED 314 817

For description see entry #154.

See Attainment—Educational and Occupational

XI. Marriage/Family and Life Transitions

198

Cervero, Ronald M., and Kirkpatrick, Thomas E. 1990. "The Enduring Effects of Family Role and Schooling on Participation in Adult Education." *American Journal of Education* 99(1): 77-93.

For description see entry #92.

See **Patterns of Attendance**

199

Goldscheider, Frances Kobrin. 1985. Measuring Life-Cycle Transition in Young Adulthood: A Cross-Validation of Data from Three Prospective Surveys. Santa Monica, CA: Rand Corporation. ED 266 384

This document examines three important national surveys that provide periodic longitudinal data on the transition to adulthood during the late 1960s and 1970s. The surveys are the National Longitudinal Study of Labor Market Experience (NLS Youth), initiated in 1966 and 1968; the Panel Study of Income Dynamics, initiated in 1968; and the NLS-72. Section I of this paper provides an introduction to the three datasets and describes two projects in the Rand Corporation Labor and Population Program which build on the complementarities of these datasets. Section II outlines the special characteristics of each survey that affect the construction of appropriate cohorts for comparison and compares them on such background characteristics as age at survey, race and parental education. Section III presents the constructions of the four measures of life-cycle progress: first marriage, departure from the parental home, school enrollment, and military service. Section IV shows how the four measures compare across surveys. Section V discusses the results and their implications for the complementary use of these datasets and for the prospective collection of information on life-cycle transitions. Background tables are appended and references are given. (Adapted from ERIC abstract)

200

Haggstrom, Gus W., and others. 1984. Changes in the Lifestyles of New Parents. Bethesda, MD: National Institutes of Health, National Institute of Child Health and Human Development. ED 260 813

This study examines how becoming a parent affects the lives of young men and women during the 7-year period following their graduation from high school. The study is based on data from the NLS-72. The research focuses on two subpopulations of the NLS: the over 8,000 participants who became parents by late 1979 and the approximately 5,000 who married but were childless at that time. Primary interests of the investigation were the education and employment activities of the young adults. The study also explored the affects of parenthood on participation in political affairs and community groups, marital stability, financial well-being, and several attitudinal measures, including educational and career expectations. The principal finding was that young couples who became parents in the 1970s, like those in previous decades, modified their lifestyles in accordance with traditional family roles—the women serving as homemakers and mothers and the men serving as breadwinners. On the whole, these young adults have met the demands and responsibilities of parenthood without changing their views of who they are or what they wish to accomplish. (ERIC abstract)

201

Haggstrom, Gus W., and others. 1981. Teenage Parents: Their Ambitions and Attainments. Bethesda, MD: National Institutes of Health, National Institute of Child Health and Human Development. ED 216 273

This report, using data from the base year through 1976 follow-up surveys of the NLS-72, presents the results of a study of the impact of early family formation on young people's lives. Following a discussion of methodology and data, the report

examines the effects of early family formation on postsecondary education, career development, women's orientation toward homemaking, dependency on parents and society, economic characteristics, fertility and attitudes. By distinguishing between early parenthood and early marriage without children, this report reveals that many of the effects that might be attributed to early parenthood also show up as effects among nonparents who married at approximately the same time. Although the materials stress that the data apply to parenthood in the late, rather than early, teens, the report challenges the notion that early parenthood, by itself, has a destructive impact on the ambitions and attainments of teenagers. The report concludes that teenage parenthood should be regarded as only one aspect of a broader process of early family formation. The six appendices provide definitions of variables, a model for estimating effects, background factors affecting early parenthood, a regression index, and sex-role attitude measures. A bibliography is also included. (Adapted from ERIC abstract)

202

Kobrin, Frances. 1981. High School Seniors and High School Dropouts: An Evaluation of Life Cycle Bias in the National Longitudinal Study of the High School Class 1972. Santa Monica, CA: Rand Corporation. ED 219 394

This study uses the March 1972 Current Population Survey (CPS) and the NLS-72 data to note differences in several life-cycle dimensions, including marital, parental, and employment status. The author chose to use CPS because the NLS data are somewhat biased (only high school graduates are included in the dataset).

Results show small differences between high school seniors and dropouts in terms of employment patterns. Findings also indicate that more dropouts were married and had children by the spring of their senior year and that more of them no longer lived with their parents.

203

Owings, Jeffrey, and others. 1980. "The Impact of Motherhood on the Career Pattern of Working Women: Differences in the Life Histories and

Career Status of Employed Mothers and Working Women Without Children." Paper presented at the Annual Meeting of the American Educational Research Association, Boston, MA, April 1. ED 201 830

This study compares employed mothers with working women who do not have children along dimensions reflecting their life histories and labor market experiences. It uses data from the National Longitudinal Survey of Youth and the NLS-72 base year through 1976 follow-up surveys. The analysis focused on differences in socioeconomic background, educational attainment and goals, occupational status and aspirations, and personal attitudes of employed mothers and employed women without children. A regression analysis was undertaken to determine which variables would be predictors of the dichotomous variable indicating whether a woman is a mother, when their overlapping effects are controlled. Statistical analyses did not contradict the suggestions of theorists in vocational development that employed mothers have many obstacles to surmount as their careers develop. They were more likely to come from lower socioeconomic levels, to have completed fewer years of education, and to be available to work only part-time. (Adapted from ERIC abstract)

204

Powell, Brian, and Steelman, Lala Carr. 1990. "Beyond Sibling Size: Sibling Density, Sex Composition, and Educational Outcomes." Social Forces 69(1): 181-206.

For description see entry #150.

See Attainment—Educational and Occupational

205

Rindfuss, Ronald R., and Stephen, Elizabeth Hervey. 1990. "Marital Noncohabitation: Separation Does Not Make the Heart Grow Fonder." Journal of Marriage and the Family 52 (February): 259-270.

This study uses both the 1976 and 1979 follow-up surveys of the NLS-72 and Census data to examine factors that may explain marital noncohabitation

and its possible consequences. The article abstract is as follows:

A variety of situations may arise in which husbands and wives live in separate households, temporarily or permanently, for reasons other than marital discord. Such living arrangements may have far-reaching implications, and perhaps the most important question is whether living apart from one's spouse leads to divorce. The percentage of currently married persons living apart in the United States is highest for ages 18-24 and for blacks. The two most common identifiable reasons for husbands and wives not living together are military service and incarceration. We found that those living apart from their spouses in 1976 were nearly twice as likely to experience a marital dissolution within 3 years, compared with persons cohabiting with their spouses.

206

Rindfuss, Ronald R. 1991. "The Young Adult Years: Diversity, Structural Change, and Fertility." *Demography* 28(4): 493-512.

This study looks at the young adult years of a sample of NLS-72 participants in terms of family activities, school/work activities, the impact of one sphere of activities on the other and the extent that activities from each overlap. Effects of the order of these activities are also investigated. Fertility rates for the sample are also examined.

Findings indicate that the young adult years are "demographically dense" (high incidence of demographic action such as marriage, moving, leaving school, childbearing) and diverse in terms of the numerous roles young adults experience. Results also show that more young adults are "disorderly" in the school/work sphere in that they did not follow expected routes of school then work or continuous work. Disorderly sequences in the school/work sphere are more common for women than men. Trends in marital dissolution and out-of-wedlock births indicate an increase in disorderly sequences in the family sphere. Examining fertility notes an increase for all age groups between 1974 and 1987. Also, the fertility rates for unmarried women increased faster than the fertility rates for married women.

207

Rindfuss, Ronald R., Swicegood, C. Gray, and Rosenfeld, Rachel A. 1987. "Disorder in the Life Course: How Common and Does it Matter?" *American Sociological Review* (December) 52: 785-801.

This study examines the transition from early adulthood to parenthood by assessing the impact of the ordering of family and nonfamily activities on parenthood. Data are taken from the NLS-72 base year through 1979 follow-up surveys. The article abstract is as follows:

Many researchers conceptualize the major transitions in the life course as occurring in an orderly progression. Using data from the NLS-72 and its follow-ups, we find considerable disorder in non-family events. By the time they had been out of high school 8 years, over half of the men and women in the 1972 class had sequences of states that deviated from the "normal" (e.g., they returned to school or moved to a category not usually included in life-course research, such as employment). To what extent does this disorder matter? We answer this question with respect to the transition to parenthood. A simple measure of disorder did not uniformly affect this transition. Rather, disorder has heterogeneous effects. Particular sequences of activities, some orderly, some not, affect when people first become parents. For example, delaying the effect of education is less powerful if that education has been interrupted by work or some other activity.

208

Teachman, Jay D. 1990. "Socioeconomic Resources of Parents and Award of Child Support in the United States: Some Exploratory Models." *Journal of Marriage and the Family* (August): 689-699.

Data from the "Fifth Follow-Up" of the NLS-72 are used to examine factors affecting the determinants of child support awards and amounts. The article summary is as follows:

The American system of family and kinship is undergoing considerable change. Decreasing stability in the nuclear family has called into question the role of parents in providing for children across sepa-

rate households. A significant proportion of absent parents do not make economic contributions to the well-being of their children. As a consequence, children living in single-parent homes run a greater risk of living in poverty than children in two-parent homes. This study examines the determinants of child support awards and amounts for a sample of ever-divorced women from the NLS-72. The argument is divorce influences the amount and award of child support. The results indicate that socioeconomic resources are significant predictors of child support outcomes.

209

Teachman, Jay D., and Polonko, Karen. 1990. "Negotiating Divorce Outcomes: Can We Identify Patterns in Divorce Settlements?" Journal of Marriage and the Family 52: 129-139.

This study uses data from a sample of 570 white and 94 African-American respondents from the "Fifth Follow-Up" of the NLS-72 to describe observed patterns in divorce outcomes. The article abstract is as follows:

As nuclear families have become increasingly less stable over the past quarter of a century, married couples have been faced with the difficult task of negotiating the terms by which marriage is ended. For parents, divorce involves questions revolving around the care and sustenance of children. In this study, we investigate whether observed divorce settlements suggest that parents make trade-offs between several dimensions related to their children, including custody, visitation, child support, and the marital property. Using data from the NLS-72, we find evidence consistent with the notion that parents

make trade-offs. We also suggest a framework within which these results can be interpreted.

210

Waite, Linda J., and others. 1986. The Effects of Parenthood on the Career Orientation and Job Characteristics of Young Adults. Bethesda, MD: National Institutes of Health, National Institute of Child Health and Human Development. ED 294 044

For description see entry #162.

See Attainment—Educational and Occupational

211

Waite, Linda J., Haggstrom, Gus W., and Kanouse, David E. 1985. "The Consequences of Parenthood for the Marital Stability of Young Adults." American Sociological Review 50 (December): 850-857.

The study examines the effects of a first birth on short-run stability of marriage compared to stability with estimates of what would have happened without the occurrence of a birth. Data are taken from NLS-72 for 2,901 women and 1,979 men who became parents between October 1972 and October 1979 and whose months of marriage and entry into parenthood were known. A comparison group consisted of 2,807 women and 2,474 men who married but did not have children through October 1979 (or October 1976 if no response to the "1979 Follow-Up") and who were either divorced or separated.

Results show that only between 5 percent and 8 percent of parents actually divorced or separated compared to 20 percent who would have divorced or separated in the absence of parenthood, indicating the influence of children on marital stability.

XII. Economics of Education

212

Altonji, Joseph G. 1990. Accounting for Uncertain Educational Outcomes in Estimating the Return to Education. New York, NY: National Center on Education and Employment; Santa Monica, CA: Rand Corporation. ED 333 820

A prototype model was developed to estimate the impact of several variables on the internal rate of return to starting college. The model arose from observations of a nonlinear relationship between education and earnings, that many students who began college never finished, that large differences in earnings exist between college and high school graduates across fields of specialization, and that many high school and family background characteristics appear to affect earnings. The model was then applied to data from the NLS-72. Results found that black males had a lower rate of return on 1 year of college than white males (5.4 percent versus 5.9 percent), which appears, however, to be due not to race but to other characteristics. Females also had a lower rate of return than men. It was noted that none of these differences are explained by dissimilarities in the observed characteristics of males and females. Other research using this model has shown a higher return on college attendance for women over men. It is suggested that further research and refinement of the model is necessary before strong conclusions can be developed. (Adapted from ERIC abstract)

213

Benson, Charles S., Ibsen, Maya H., and Klein, Steven G. 1991. Economic Returns to Vocational Education and Other Types of Occupational Training. Berkeley, CA: University of California, Berkeley.

This study examined the economic returns to vocational education and other types of occupational training in terms of labor market outputs (wage and salary earnings and human capital increases) and other outputs such as social returns (reduction of taxpayer transfers to unemployed, im-

proved living conditions, reduced crime and homelessness) for high school graduates who did not go on to college and for students who attended college. Data are drawn from the NLS-72, the National Longitudinal Survey of Labor Market Experience (NLS Youth), and High School and Beyond.

Findings indicate that vocational education exhibits its greatest outcomes if and when it is followed by employment in a related field. Care must be taken to examine the effects of vocational education by type of program, race, and gender because of differences in outcomes. (Article summary)

214

Campbell, Paul B., and Basinger, Karen S. 1985. Economic and Noneconomic Effects of Alternative Transitions Through School to Work. Columbus, OH: Ohio State University, National Center for Research in Vocational Education. ED 254 638

For description see entry #40.

See School-to-Work Transition

215

Conroy, William G., Jr. 1980. "The Economic Effects of Vocational Education." VocEd 55(7): 39-41.

For description see entry #182.

See Vocational Technical and Vocational Education

216

Datcher-Loury, Linda, and Loury, Glenn C. 1983. The Effects of School Quality on Earnings. Washington, DC: U.S. Department of Education, National Institute of Education. ED 267 083

For description see entry #44.

See School/Program Effects

217

Inger, Morton, and Larsen, Eric. 1990. "The Decision to Start College: Factoring In the Uncertainty." National Center on Education and Employment Brief No. 11, November 1990. ISSN 0889 8049

Using information from two papers by Joseph Altonji ("The Demand for and Return to Education When Education Outcomes are Uncertain," Technical Paper No. 21. New York: National Center on Education and Employment, 1991, and "Accounting for Uncertain Educational Outcomes in Estimating the Return to Education," Technical Paper No. 15. New York: National Center on Education and Employment, 1990.), the authors discuss the importance of considering the effects of uncertainty of educational outcomes on the decision to pursue postsecondary education. Included in the discussion are Altonji's calculation of rates of return that high school graduates might expect if they choose to pursue higher education and differences in return between several classifications of high school students such as men and women or students of different ability levels.

Altonji's findings demonstrate greater economic benefits for women who start college compared with men who start, but show greater expected benefits from college completion for men. In terms of family background and coursework, having a favorable family background or being in an academic high school curriculum affects economic returns of men. For women, simply attending college affects economic returns. Altonji also found significant differences in returns between high and low-

ability men, with low-ability men receiving few economic benefits from starting college compared to those who entered the labor market directly after high school. The authors conclude that Altonji's model can be useful in examining the effects of several variables on the probability of realizing certain educational outcomes.

218

Kolstad, Andrew. 1982. Does College Pay? Wage Rates Before and After Leaving School. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 224 438

This study looks at the relationship between educational choice and future salary levels using data from the NLS-72. The sample consisted of 17,366 respondents to the base year through 1979 follow-up surveys.

Findings reveal a strong relationship between educational attainment and salary, as higher starting salary was associated with greater amounts of schooling. In general, men who did not attend postsecondary education have a greater advantage in catching up to men who attended college than women who did not attend college have in receiving salaries equivalent to women college graduates. For all levels of education, however, men's wages were found to be higher than women's. Findings also indicate crossover points, or points where wages are relatively equal for those attending postsecondary education and those who did not. The age of crossover was 25 for men and 22 for women.

XIII. Testing

219

Bekhuis, Tanja CH.M. 1988. "The Estimation of True Scores for Tests Not Taken: A Simulation Study." Paper presented at the Annual Meeting of the Eastern Educational Research Association, Miami Beach, FL, February 24-27. ED 304 477

The author tests an Educational Testing Service (ETS) procedure, which is based on item response theory and estimated true scores on tests not taken. The reading, vocabulary, and mathematics tests of high school seniors from the NLS-72 and the High School and Beyond 1980 and 1982 senior cohorts are used in the analysis. The author concludes that the procedure should remain experimental. "In particular, the method should not be used for assessing cohort differences until the likely direction and magnitude of bias, given the constraints of any specific study, are well understood."

220

Crouse, James. 1986. "Should a Million and a Half Students Be Required to Take the SAT Next Year?" Phi Delta Kappan 67 (5): 345-352. See also Crouse, James. 1985. "Does the SAT Help Colleges Make Better Decisions?" Harvard Educational Review 55(2): 195-219.

This article, adapted from a research article (Crouse, James. 1985. "Does the SAT Help Colleges Make Better Decisions?" Harvard Educational Review 55(2): 195-219.), argues that the use of SAT scores does not help colleges make more accurate admissions decisions in terms of academic performance and graduation rates of students they admit. Using a sample of 2,470 students from NLS-72 who attended college, the author conducted a policy comparison (admissions policies using high school rank versus high school rank plus SAT scores) and examined the rate of accuracy in admission decisions, the effect of each policy on the number of false positive and false negatives and overall excellence of the college (e.g., freshman grades and college completion rates). Results show high correlations between policies using high school rank alone and those using both high school rank and

SAT scores for admissions in predicting academic performance and college completion.

221

Hilton, Thomas L., and others. 1984. "Score Change Partitioning Analysis of the NLS and HS&B Test Data." Paper presented at the Annual Meeting of the Evaluation Network/Evaluation Research Society, San Francisco, CA, October 10-13. ED 271 508

Since the mean score for a sample composed of several subgroups can be viewed as the sum of the mean of each subgroup weighted by the proportional size of the subgroup, then the mean change in a time period—in this case, from 1972 to 1980—is the sum of the differences between the means for each subgroup, with each mean weighted by its proportional size. Thus, the mean change for the total sample is influenced both by mean change in the score for each group—in this case, a test score—and by change in the proportional size of the group. A decline or gain in mean test scores has both a subgroup mean component and a population shift component. In addition, how much a particular subgroup may contribute to the total change can be shown to depend on what might be called its weighted distance from the original total mean. How these simple concepts can be used to decompose score gains or declines is demonstrated by means of data from the seniors in the NLS-72 and High School and Beyond. The presentation should be of both methodological and substantive interest. (ERIC abstract)

222

Rock, Donald A., and others. 1985. Psychometric Analysis of the NLS and the High School and Beyond Test Batteries. A Study of Excellence in High School Education: Educational Policies, School Quality, and Student Outcomes. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 314 452

The authors examined changes in tested achievement using cross-sectional comparisons between the NLS-72 seniors and the 1980 High School

and Beyond senior cohort. They also examined the extent and correlates of cognitive growth between the sophomore and senior year in high school.

The overall analysis was designed to:

(1) Estimate possible effects on performance of differing administrative procedures from one cohort to another and to determine whether the tests were measuring the same things across cohorts or only for different administrations within the same cohort.

(2) Estimate item statistics, reliabilities, and indices of precision of measurement for the separate tests and to determine how these measures vary across sex and ethnic groups.

Item analysis statistics, computed for all tests in all administrations, were used to investigate the appropriateness of the tests in terms of difficulty, expected gains in score, and reliability.

Findings offer little empirical support for the idea that the tests measure different abilities for different subgroups or genders. Findings also show large gains in vocabulary and reading over the 2-year schooling period. White students showed greater gains than blacks or Hispanics, and Hispanic women showed greater gains than Hispanic men.

223

Rock, Donald A., and others. 1985. Factors Associated with Decline of Test Scores of High School Seniors, 1972 to 1980. A Study of Excellence in High School Education: Educational Policies, School Quality, and Student Outcomes. Washington, DC: U.S. Department of Education, National Center for Education Statistics. ED 271 517

Data from the senior cohort of the NLS-72 and the 1980 senior cohort of High School and Beyond are used to examine changes in academic achievement and to identify school as well as student factors

related to these changes. The study also seeks to focus on factors that can be changed via educational policy.

Findings include declines for all three achievement tests (vocabulary, reading, and mathematics) between 1972 and 1980 with the largest declines occurring in vocabulary and reading. Four school-level changes appear to have played a major role in this decline. They are: (1) a greater likelihood of being in a general or vocational curriculum rather than the academic curriculum; (2) a drop in the frequency with which students report taking "traditional" college preparation courses such as foreign languages, science and/or courses requiring laboratory work; (3) a decrease in the amount of homework done; and (4) an increasing dissatisfaction among the students with the lack of emphasis on academics in the schools. Significant changes were also seen in the characteristics of high school seniors, their homes and families, their schools, and their attitudes and behaviors.

Policy implications, based on the results of the study, include: (1) increasing required courses in the "New Basics" for nonacademic students; (2) upgrading and reviewing course content and instructional methods to ensure a more rigorous content; (3) assigning more appropriate amounts of homework in all courses; and (4) continuing to provide special programs for educationally and economically disadvantaged students, the handicapped and language minority students.

224

Wilder, Gita Z., and Powell, Kristin. 1989. Sex Differences in Test Performance: A Survey of the Literature. College Entrance Examination Board Report No. 98-3. ED 308 231

For description see entry #171.

See Gender and Racial-Ethnic Differences

XIV. Other

225

Adelman, Clifford. 1990. A College Course Map: Taxonomy and Transcript Data. Based on the Post-secondary Records 1972-1984 of the High School Class of 1972. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. ED 326 153

This document is the result of a 2-year project (1988-90) to revise the taxonomy of the 1985 edition of the Classification of Instructional Programs (CIP) to describe courses. Supported, in part, by the National Science Foundation and the U.S. Department of Labor, 1,037 course categories were empirically derived from the 485,000 course titles in the NLS-PETS and were reviewed by teams of college faculty. These categories were simultaneously used to recode the NLS-72 COURSE file. A College Course Map describes this process and its decision rules, and shows what course categories were deleted, modified and added to the 1985 CIP. Following the taxonomy, the volume includes tables indicating the percentage of students completing undergraduate courses in 1,037 course categories; percentage of students completing undergraduate courses in 103 aggregate course categories; and the distribution of all completed courses by type of institution. Additional data covers basic demography and high school backgrounds of students in the NLS-PETS; highest degree earned; college scholarship support; basic demography of 2- and 4-year and transfer attendance patterns; date of bachelor's degrees and associates degrees; course of study and degrees earned beyond the bachelor's; and college experiences and attainments.

226

Adelman, Clifford. 1992. Tourists in Our Own Land: Cultural Literacies and the College Curriculum. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

This study uses the base year through fifth follow-up surveys of the NLS-72 and the PETS files

to assess the extent of college students' exposure to different cultures, societies and intellectual traditions. The author found three basic categories of cultural information: Western culture and society, non-Western culture and society, and minority and women's studies. By examining course-taking patterns, the study concluded that:

(1) The sheer amount of time this generation spent studying accounting, physical education, nursing, and electrical circuits, for example, dwarfs the amount of time it spent in all the streams of cultural information put together.

(2) This generation's exposure to cultural literacies other than that of Western societies was extremely limited, and the bulk of its exposure to Western traditions was confined to introductory-level courses.

(3) Doctoral degree-granting institutions were the principal providers of information on non-Western culture and society, while comprehensive colleges were the principal providers of information on domestic minority cultures.

(4) The curriculum of students at elite colleges (3 percent of all bachelor's degrees in the NLS-72) was so different from that followed by the other colleges (97 percent) that it was irrelevant to discussions of the diffusion of cultural information.

(5) Demography was curricular destiny both in expected and unexpected ways: as an example of the expected, women comprised 80 percent of enrollments in Women's Studies courses; as an example of the unexpected, white students were less likely than minority students to study history of any kind.

The conceptual framework for the study draws on E.D. Hirsch, Jr.'s notions of "cultural literacy," the "schemata" and "scaffolding" theories of reading, and distinctions between the scholarly canon and the pedagogical canon. The study also examines

(and criticizes) other sources of information on what college students study, including catalog analyses, deans surveys, enrollment surveys, course schedules, and syllabi.

227

Adelman, Clifford. 1989. Cultural Literacies in the College Curriculum: The Record of a Generation. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. ED 318 377

This study, a precursor to entry #226, uses NLS-PETS data to explore the role of higher education in the diffusion of cultural information. Four streams of information, drawn from the NLS-72 archive, are identified as primary cultural language and secondary stores of language corresponding to demographic, cultural interest and specialist subgroups. The four stores are represented by course cultures in (1) minority and women's studies; (2) popular culture/media; (3) non-Western culture and society; and (4) Western culture and society. The paper also examines the character of institutions providing cultural literacy to the general college-going population as well as the demography of enrollments in the four clusters.

Findings related to demographics showed that only one in five BA degree recipients had no post-secondary exposure to Western cultural information. Students majoring in applied sciences and engineering showed the lowest rates of participa-

tion. Differences in course-taking patterns by gender were slight. In general, the author concluded that, as a result of this generation's limited exposure to secondary cultural literacies, "it certainly seems unsuited to participate in the diversity of world culture and economy."

228

Adelman, Clifford. 1987. "Basic Statistical Portrait of American Higher Education." Prepared for the Second Anglo-American Dialogue on Higher Education. ED 290 410

Previously published data, as well as the Post-secondary Transcript Sample (PETS) of the NLS-72 and the "Fifth Follow-Up" Survey (1986) of the NLS cohort, are used for this statistical study of higher education in America. The data focus on the formal higher education sector in America (undergraduate education in particular). The topics covered include: institutions (classifications and enrollment); state frameworks (enrollments, capacity, and support); students (aspirations and access); faculty; governance (state, institution, faculty); and assessment. Major themes from these data include a decline in social sciences and rise of applied fields, a rise in comprehensive colleges, a decline in educational aspirations of high school graduates in the United States, and a reappearance of student distance from learning. Numerous tables and graphs illustrate the major points. The NLS-72 data play secondary roles.

XV. Tabulations

The following is a list of tabular summaries using NLS-72 data.

229

Carroll, C. Dennis. 1984. High School and Beyond Tabulation: Time on Homework for High School Seniors in 1972, Seniors in 1980, Sophomores in 1980, and Seniors in 1982. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

230

Eagle, Eva. 1988. Educational Experience of the 1972 Senior Class. Berkeley, CA: MPR Associates.

231

Eagle, Eva. 1988. Comparison of Data Sets: Postsecondary Enrollment, Persistence, and Attainment for 1972, 1980, and 1982 High School Graduates. Berkeley, CA: MPR Associates.

232

Fitzgerald, Robert. 1988. Civic Participation and Attitudes of the 1972 Senior Class. Berkeley, CA: MPR Associates.

233

Geist, Mary B. 1987. NLS-72 "Fifth Follow-Up" Classification Variable Set. Washington, DC: U.S. Department of Education, Center for Statistics.

234

Geist, Mary B. 1987. NLS-72 Child Care Alternatives for Parents Who Work: NLS 1986 "Fifth Follow-Up" Washington, DC: U.S. Department of Education, Center for Statistics.

235

Gifford, Antoinette. 1988. Family Formation Patterns of the 1972 Senior Class. Berkeley, CA: MPR Associates.

236

Knepper, Paula. 1988. Profile of 1972 High School Graduates Who Were Vocational Students at the Postsecondary Level. Washington, DC: U.S. Department of Education, Center for Statistics.

237

Knepper, Paula. 1988. Entry and Persistence of Postsecondary Vocational Students Who Were High School Graduates in 1972. Washington, DC: U.S. Department of Education, Center for Statistics.

238

Knepper, Paula. 1988. Field of Entry, Timing, and Completion for Postsecondary Vocational Students Who Were High School Graduates. Washington, DC: U.S. Department of Education, Center for Statistics.

239

Knepper, Paula. 1988. Credits Earned by Year and Level of Attainment for Postsecondary Vocational Students Who Were High School Graduates in 1972. Washington, DC: U.S. Department of Education, Center for Statistics.

240

Knepper, Paula. 1988. Credits Earned by Field of Study and Level of Attainment for Postsecondary Vocational Students Who Were High School Graduates in 1972. Washington, DC: U.S. Department of Education, Center for Statistics.

241

Knepper, Paula. 1988. Enrollment and Aid Status of Postsecondary Vocational Students Who Were High School Graduates in 1972. Washington, DC: U.S. Department of Education, Center for Statistics.

242

Knepper, Paula. 1988. Progress and Persistence in Postsecondary Education for 1972 High School Seniors. Washington, DC: U.S. Department of Education, Center for Statistics.

243

Knepper, Paula. 1988. Progress and Persistence in Postsecondary Education for 1972 High School Seniors Who Completed a BA Degree. Washington, DC: U.S. Department of Education, Center for Statistics.

244

Knepper, Paula. 1988. Progress and Persistence in Postsecondary Education for 1972 High School Seniors Who Did Not Complete a BA Degree. Washington, DC: U.S. Department of Education, Center for Statistics.

245

Kolstad, Andrew J. 1984. NLS-72 Tabulation: Wage Rates and Earnings After High School or College by Gender, Schooling, and Starting Pay. Washington, DC: National Center for Education Statistics.

246

MPR Associates. 1988. The Postsecondary Education of 1972 Seniors Completing Associate of Arts Degrees and Certificates. Berkeley, CA: Author.

247

MPR Associates. 1988. The Postsecondary Education of 1972 Seniors Completing Academic Associate of Arts Degrees. Berkeley, CA: Author.

248

Owings, Jeffrey A. 1986. Postsecondary Credits Earned in Humanities by 1972 High School Seniors Who Received Bachelors' Degrees. Washington, DC: U.S. Department of Education, Center for Statistics.

249

Owings, Jeffrey A. 1986. Postsecondary Credits Earned in Math and Science by 1972 High School Seniors Who Received Bachelors' Degrees. Washington, DC: U.S. Department of Education, Center for Statistics.

250

Owings, Jeffrey A. 1986. Postsecondary Credits Earned by 1972 High School Seniors Who Received Bachelors' Degrees. Washington, DC: U.S. Department of Education, Center for Statistics.

251

Salganik, Laura. 1987. Patterns of Student and Course Credit Transfers Among Postsecondary Students in the High School Class of 1972. Washington, DC: Pelavin Associates.

252

Salganik, Laura. 1988. Course Enrollment Patterns at 4-Year Colleges. Washington, DC: Pelavin Associates.

253

Salganik, Laura, and Tal, Joseph. 1988. Progression Patterns for BA Recipients. Washington, DC: Pelavin Associates.

254

Schmitt, Carl. 1988. Highest Educational Degree Attained by 1972 High School Seniors by Sex, Race, Type of High School, and Type of Community as of Spring 1976. Washington, DC: U.S. Department of Education, Center for Statistics.

255

Schmitt, Carl. 1988. Highest Educational Degree Attained by 1972 High School Seniors by Sex, Race, Type of High School and Type of Community as of Spring 1979. Washington, DC: U.S. Department of Education, Center for Statistics.

256

Schmitt, Carl. 1988. Highest Educational Degree Attained by 1972 High School Seniors by Sex, Race, Type of High School and Type of Community as of Spring 1986. Washington, DC: U.S. Department of Education, Center for Statistics.

257

Stowe, Peter. 1985. Application Rates of 1972 and 1980 High School Seniors to Postsecondary Institutions. Washington, DC: U.S. Department of Education, Center for Statistics.

258

Stowe, Peter. 1984. NLS-72 Tabulation: Graduate Student Borrowing. Washington, DC: U.S. Depart-

ment of Education, National Center for Education Statistics.

259

Tuma, John. 1988. Labor Force Experiences of the 1972 Senior Class. Berkeley, CA: MPR Associates.

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