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ABSTRACT

An interim report on the congressionally mandated National Study of Student Support Services (SSS) focuses on the characteristics of college freshmen program participants and on the level and type of services they receive. The federally funded grant program is designed to help economically disadvantaged students achieve success at the postsecondary level. It is intended to facilitate participating students' high school completion, entry into and completion of postsecondary education, and entry into graduate study. Study data were from a baseline survey of all freshman participants (2,800) at 28 sampled 2-year and 4-year institutions with SSS programs and detailed service records kept for a sample of freshman and non-freshman participants over the course of one academic year. Findings include the following: (1) 60 percent of SSS freshmen were either 18 or 19 years old but this proportion was lower than that found among all freshmen nationwide (90 percent); (2) 67 percent were female; (3) 41 percent were white, 38 percent were black, 22 percent Hispanic, 4 percent Asian, and 2 percent Native American; (4) SSS projects cost $768 per student in 1992; (5) most SSS programs offer a mix of counseling and tutoring and some involvement in instructional courses and workshops; (6) mean number of service contacts per SSS participant was 12 and mean number of hours of contact was 10; and (7) the mean grade point average for SSS students was 2.3. Appendices provide additional detail on sample methodology, the questionnaire used, and the file layout. (JB)

National Study of Student Support Services

Interim Report:

Volume 2

Profile of Freshman Participants and Project Services: 1991-92

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The views expressed in this report, developed under contract to the U.S. Department of Education, do not necessarily reflect the position or policy of the Department, and no official endorsement by the Department should be inferred.

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The study was performed under contract with Westat, Inc., and subcontracts with SMB Economic Research and Mathematica Policy Research (MPR). The project team included Margaret Cahalan, project director; Lana Muraskin, principal investigator; David Wright, statistician; Jacqueline Severynse, statistician; Bradford Chaney, senior analyst; David Myers, senior analyst; Diane Ward, survey operations manager; Candi Hitchcock, program contact coordinator; Selma Chen, data preparation; Carin Celebuski, propensity analysis coordinator; Allen Belsheim, programmer; and Ethel Sanniez, programmer. Reports were prepared with the assistance of Susan Hein, graphics; Carol Litman, editor; and Sylvie Warren, word processing. The site visitors were Allison Henderson, Adrienne Von Glatz, Nancy Brigham, James Caruthers, Claryce Nelson, Elaine Carlson, Sheila Rosenblum, Carin Celebuski, Evelyn Marshall, Lana Muraskin, and Margaret Cahalan. Vicky Carlson was the site visit scheduler. Lance Hodes provided Westat corporate support for the project.

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EXECUTIVE SUMMARY

Chapter 1. Introduction

This is the second volume of the interim report of the congressionally mandated National Study of Student Support Services (SSS). The report focuses on the characteristics of SSS participants and on the level and type of services they receive. Chapter 2 of the report presents information from a baseline survey on the characteristics of Student Support Services freshmen, with comparisons to data on freshmen from the same institutions and to national norm data on the characteristics of all freshmen. Chapter 3 presents information from service records submitted by the projects on the type and level of services received; Chapter 4 presents information on the course-taking patterns of SSS participants during their freshman year. Key findings from each chapter are presented below.

Chapter 2. A Profile of Student Support Services Freshmen: 1991-92

- Most SSS freshmen (60 percent) were either 18 or 19 years old, but this proportion was lower than that found among all freshmen nationwide (90 percent). SSS students at 2-year institutions were older than SSS students overall, with 56 percent (compared with 31 percent) 21 years or older.

- The SSS sample of freshman participants was disproportionately female (67 percent), compared with 55 percent of non-SSS freshmen at the sampled institutions.

- Among SSS freshmen participants 41 percent were white, 38 percent African-American, 22 percent Hispanic, 4 percent Asian, and 2 percent Native American. Among all undergraduates 80 percent were white, 9 percent African-American, 6 percent Hispanic, 4 percent Asian, and .8 percent were Native American.

- The SSS participants were less likely to be married than freshmen overall (11 percent versus 27 percent), but roughly as likely to have dependent children (22 percent versus 24 percent).

- Among SSS participants at 2-year institutions, almost half have dependent children.

- Overall, 17 percent of SSS students reported having a disability. As might be anticipated from the eligibility requirements, SSS students have a higher rate of disabilities than freshmen overall. For example, 6 percent reported a specific learning disability, compared with 2 percent among all freshmen.

- Though nearly all SSS freshmen received a high school diploma, the proportion was lower than among all freshmen (91 percent versus 98 percent).

- SSS students averaged 3.3 years of mathematics in high school, 1.6 years each of foreign languages and the physical sciences, and 1.4 years of biological sciences. Students at doctoral institutions generally had more years in these areas than students at 2-year institutions.

- One-fourth (28 percent) of SSS participants reported they had participated in other federal programs. Within TRIO, 6 percent had participated in Upward Bound, 4 percent in Talent Search, and 3 percent in Equal Opportunity Centers.

- The mean college entrance test scores for the SSS students were 352 on the SAT-Verbal, 405 on the SAT-Math, and 19 on the ACT composite. By comparison, the national averages for all freshmen were 422, 474, and 21, respectively.

- Though they were freshmen, 30 percent of the SSS participants had taken college courses at some other institution since leaving high school, and 25 percent had received college credit.

- The most common family arrangements of the SSS students during the time they were growing up were to live with two parents (70 percent) or with only their mother or female guardian (24 percent). Also, 85 percent lived with brothers or sisters. Their fathers most commonly worked in the service occupations (34 percent) or as craftsmen, operators, or laborers (31 percent), and their mothers in the service occupations (50 percent) and clerical/sales occupations (21 percent).

- Most SSS students reported their father had a high school education or less (70 percent), compared with 40 percent of all freshmen nationwide. A similar percentage had mothers with a high school education or less (67 percent), compared with 43 percent nationwide.

- Over one-third of SSS freshmen had fathers without a high school diploma.

- About half (47 percent) of SSS students came from families with annual family income of less than $15,000, and 71 percent were from families with incomes of less than $25,000. By contrast, only 12 percent of all freshmen nationwide had family incomes of $15,000 or less.

- Almost one-third (32 percent) of SSS students reported that another language besides English was spoken at their home.

- The most common majors of SSS freshmen were health-related fields (18 percent), business (17 percent), education (11 percent), and the social sciences (11 percent).

- Close to one-third (64 percent) of SSS freshmen attended colleges within 50 miles of home, compared with 46 percent of all freshmen nationwide. They were less likely to live in college housing (35 percent versus 62 percent), and more likely to live off-campus, separately from their parents (33 percent versus 9 percent).

- SSS students were more likely to be full time than non-SSS students at the same institutions (77 percent versus 61 percent). This was especially true at 2-year institutions (66 percent versus 42 percent).

- About half of SSS students worked while school was in session, mostly through off-campus jobs (30 percent), but also through work-study (16 percent) or other on-campus jobs (3 percent).

- SSS freshmen were much more likely to receive financial aid (82 percent) than were non-SSS freshmen at the same institutions (43 percent).

- Despite financial aid, 41 percent of SSS freshmen expressed a major concern that they would not have enough funds to finish their college education, and 44 percent expressed some concern.

- Some of the most common SSS-like services that the SSS students reported receiving (but which may or may not have been provided through SSS) were student orientation (59 percent), tutoring (55 percent), and individual counseling (43 percent). Except for student orientation, students were generally as likely or more likely to expect to use each of the services in the future as they had used them in the past.

- Most SSS freshmen (53 percent) described their current grades as either mostly B's or about half B's and half C's. By the time of graduation, 47 percent expected mostly A's or half A's and half B's, an improvement of 28 percent from their current term grades.

- The highest degrees expected by SSS students were essentially the same as for all freshmen nationwide: 27 percent expected a bachelor's degree (versus 28 percent nationwide), 36 percent a master's degree (versus 36 percent), and 27 percent a doctorate (versus 26 percent). SSS students often had higher goals than they reported their parents had for them, with 63 percent

expecting a graduate degree, compared with 49 percent of the students' parents.

- The primary deterrent that SSS students saw as potentially preventing them from receiving a degree was the cost of education (29 percent). However, 34 percent said they were absolutely certain they would obtain a degree.

- SSS students were positive about their college experience, with 45 percent enthusiastic about it, and 44 percent saying they liked it. If they were to start over again, 43 percent said they would definitely attend the same college, and 40 percent would probably do so.

- Half of SSS students (47 percent) had definite career plans for after college, and 30 percent had probable plans. Most commonly, they expected to be doing professional or technical work (62 percent).

- SSS students often had a positive self-concept, and sometimes more so than for all freshmen nationwide. They were more likely than all freshmen to consider themselves above average in terms of intellectual self-confidence (57 percent versus 51 percent) and social self-confidence (55 percent versus 46 percent), but less likely in academic ability (43 percent versus 52 percent) and mathematical ability (30 percent versus 36 percent).

Chapter 3. A Profile of Services Received by SSS Students

- Most SSS programs offer a mix of services. Almost all projects offer counseling and tutoring to at least some of the participants. Over half have some involvement in instructional courses. Most also have workshops.

- The average cost per student in 1992 of SSS projects was $768, and the average project size was 235 participants.

- Counseling is the most frequent service provided, with 81 percent of participants receiving this service. On average the participants receiving counseling had about seven contacts per year. Freshman averaged eight contacts and nonfreshman, six contacts.

- The counseling was not evenly spread over the 9 months, but took place in a more concentrated period. The mean number of months from first to last service for counseling was 4.8 and the frequency of use per month was 1.6 times.

- About 63 percent of the SSS participants participated in tutoring. Most of the tutoring was provided by peer tutors. Students receiving peer tutoring averaged 12 contacts. Freshman had an average of 12.3 and nonfreshmen an average of 10.7 contacts.

- The tutoring tended to take place over one semester with the mean time from the beginning service to the last being 3.6 months. Over this period the mean use per month was about 4 times, or once a week.

- About 22 percent of the SSS participants had instructional courses as part of the SSS program. Freshmen were more likely than nonfreshmen to participate (30 percent compared with 12 percent) in the courses.

- About 22 percent of the participants participated in SSS-sponsored workshops and 13 percent in labs. Only 7 percent participated in cultural events.

- Among our study sample, which excluded projects that serv . only handicapped students, only 2.5 percent of the students participated in specialized services designed specifically to serve handicapped students. However, among the 2.5 percent, the frequency of contact was very high--a mean of 54 contacts. This number should be distinguished from the percentage of SSS participants who are physically disabled, about 12 percent of the SSS students.

- Overall the mean number of service contacts per SSS participant was 12 and the mean number of hours of contact was 10. Contacts were higher for freshmen (14) than nonfreshmen (9). SSS participants in 2-year colleges averaged fewer service contacts (9 contacts) than did those 4-year colleges (13 contacts).

- Among the total participants, 9 percent of students had only one service contact reported. In some cases these were students who dropped out of school very early or who may have come for only one academic advising session.

- Comparison with performance report data on all SSS projects indicates a consistency with the service record data collected by the study. Both report about 80 percent receiving counseling and about 60 percent receiving tutoring.

- Comparison of the 1991-92 study data with that collected over 10 years ago in the last study of SSS indicates that the percentage of SSS participants receiving counseling has increased from 67 in 1979-80 to 81 percent in 1991-92. The mean hours of tutoring has also increased from 9 to 13. However, the overall mean hours of service reported in 1979-80 was 14 hours, compared with 10 hours in the 1991-92 study.

- Most professional counseling is done in a one-to-one format (82 percent) as is most peer tutoring (71 percent).

- Three major unique service roles of SSS as shown in the case studies and the service records are service innovator, service integrator, and link to accountability.

Chapter 4. Preliminary Information on Course-Taking Patterns of SSS Freshman Students

- SSS freshman participants took a mean of 9.1 courses for regular credit, 0.4 courses for institutional credit, and 0.8 courses for no credit. Students at doctoral institutions generally took the most courses for regular credit, and students at 2-year institutions took the least.

- In SSS students' freshman year of enrollment, they primarily took lower level classes (a mean of 8.5 courses), while they took fewer remedial/developmental courses (1.4), introductory courses (0.2), and upper level courses (0.1). At 2-year institutions, about one-third of the courses were remedial/developmental, while only students at 4-year and doctoral institutions took upper level courses.

- The SSS students earned a mean of 21.9 credits in their freshman year, with students at doctoral institutions earning the most (23.8) and students at 2-year institutions earning the least (19.9). A large majority of the credits (18.1 of 21.9) were in lower level courses; of the remainder, a mean of 2.8 credits were in remedial/developmental courses, 0.6 credits in upper level courses, and 0.4 credits in introductory courses.

- More than half of SSS students' courses were in five subject areas: English (a mean of 2.0), mathematics (1.6), social sciences (1.5), life sciences (0.6), and physical sciences (0.4). Students at doctoral institutions took the most courses in these areas (8.3), and students at 2-year institutions took the least (4.9).

- The mean grade point average (GPA) for the SSS students was 2.3 (standardized to a common scale). There were generally only small differences in GPA based on the type of institution the students were attending, but there were larger differences based on the subject area of the course. Within the five major subject areas, SSS students earned the highest GPA in English (2.5), and the lowest in the physical and life sciences (2.1).

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1. INTRODUCTION

Student Support Services (SSS) is one of six federally funded grant programs provided for by Congress and administered by the U.S. Department of Education as part of the Special Programs for Disadvantaged Students (now called TRIO) in the Higher Education Act (HEA). The SSS program was initiated in 1970, the third of the so-called TRIO programs. The others are Upward Bound, begun in 1965; Talent Search, begun in 1966; Educational Opportunity Centers (EOC), 1974; Staff Training, 1978; and McNair, 1989.

All six programs are designed to help economically disadvantaged students achieve success at the postsecondary level by facilitating high school completion, entry and completion of postsecondary education, and entry into graduate study. They are intended to complement federal student financial aid programs by providing a wide range of supplemental services. These services may include academic enrichment and remedial services, personal, academic, and financial aid counseling, referrals, and provision of cultural experiences.

This report is the second volume in a series of reports from the congressionally mandated National Study of Student Support Services. The report presents information on areas of interest addressed by the study:

- The characteristics of Student Support Services freshman participants, with comparisons to data on freshmen from the same institution and to national data on the characteristics of freshmen;
- The type and amount of services received by SSS participants over the 1991-92 academic year; and
- The course-taking patterns of SSS freshmen during the first year of college.

The first report from the study, Volume 1, presented information on the characteristics of the programs from a number of sources, including a project survey and indepth case studies. The third and final volume will present results of a longitudinal study of program outcomes for student participants.

Under the SSS program, grants are awarded to institutions of higher education, and these institutions in turn provide supplemental services to eligible students. As stated in the 1992 reauthorization, the purpose of Student Support Services is as follows:

(1) To increase college retention and graduation rates for eligible students;

(2) To increase the transfer rates of eligible students from 2-year to 4-year institutions; and

(3) To foster an institutional climate supportive of the success of low-income and first generation college students and individuals with disabilities.

Two-thirds of the students served by the SSS program must be low income (150 percent of poverty) and first generation college, or physically handicapped. The other third must be low income, first generation, or physically handicapped. One-third of the physically handicapped must also be low income.

Services may include counseling, tutoring, workshops, labs, cultural events, special services to handicapped students, and instructional courses.

Student Support Services and the other TRIO programs, combined with federal student financial aid programs, reflect the national commitment both to enable the direct provision of services for disadvantaged students and to foster a wider climate of equal educational opportunity in higher education.

Study Design and Methodology

In response to the congressional mandate for the study, the National Study of Student Support Services seeks answers to the following questions:

1. What is the extent of the need for support services aimed at helping students remain in school?

2. What is the range and mix of support services of projects funded by the SSS program?

3. Who receives such services currently, and what are the types and amounts of service they receive?

4. What is the impact of federal support on service availability and on retention policies at institutions?

5. What are the effects of obtaining support services on students' college persistence and performance?

6. What mix of program services are most effective in meeting project goals?

These questions have been approached through two major components of the study:

- **A descriptive study of program implementation and characteristics** (the focus of the first report from the study). Data for this study were collected from a variety of sources including a national survey of project directors, analysis of performance reports, and case studies of 30 SSS projects and 20 institutions without SSS projects. Data from the Integrated Postsecondary Data System (IPEDS) on the characteristics of institutions with and without SSS grants was also examined.

- **A longitudinal study of the college experiences of students served and similar students not in the program.** This study includes examination of the educational effects (persistence in college, credits taken, and grade point average) of the federally supported SSS projects on college freshmen. Data being collected include baseline and followup surveys of freshman participants, detailed service records, and college transcripts. The study also involves the selection of a comparison group of students for whom similar data are being collected. The longitudinal study is being conducted in 30 randomly selected SSS sites, subsampled from the project director survey sample, and 20 non-SSS sites, selected to match the SSS sites (see Appendix A for description of sampling procedures). The 28 SSS sites and 19 non-SSS sites that successfully completed participation in the study over 1991-92 year are known as indepth study sites.

Focus of This Report

This report addresses the second and third research questions of the study: *Who receives services currently and what are the types and amounts of services they receive?* **and** *What is the range and mix of support services of projects funded by the SSS program?*

The two major sources of information for this report are (1) the baseline survey of all freshman participants in sampled SSS sites, and (2) detailed service records kept for a sample of freshman and nonfreshman participants over the course of one academic year. In addition, in order to provide a means of comparing SSS participants with other freshman students, we utilize two other data sources. These are student information files obtained from 28 institutions on all the freshman students at their institutions and available national norm data on characteristics of freshmen. Each of these are described below in more detail.

The Baseline Survey of Freshman Participants. Results are from the sample of 2,800 SSS freshman participants from 28 SSS indepth study project sites. Overall the SSS student participant response rate was 88 percent. In 2-year schools the response rate was 85 percent; in 4-year and doctoral schools, it was 89 percent. Among the

28 indepth study sites. 10 projects were from 2-year schools, 13 from 4-year schools, and 5 from doctoral-granting schools. All freshman participants identified by the sampled projects were included in the baseline survey sample. A participant was defined as a student receiving at least one SSS service in the 1991-92 year. The survey questionnaires were completed throughout the 1991-92 year through several means, including administration by the project staff, the mail, or extended telephone followup. Descriptive results from this survey are presented in Chapter 2.

Information from Student Information Files Obtained from the Participating Institutions. The 28 participating institutions provided files containing selected student characteristics of all freshman students at their institutions. The amount of information obtained varies by school type, with more information available at the 4-year and doctoral schools than at 2-year schools. These files make possible comparison of the SSS students with other students at their institutions. Selected information from these files is included in Chapter 2.

National Norm Data. Where possible we also utilize national norm data on all freshmen to compare the SSS student characteristics with those of freshmen nationwide. These data are taken from available sources such as the American Council on Education and the University of California's Cooperative Institutional Research Program (CIRP), including their report *The American Freshman: National Norms for Fall 1991* (identified in this report as CIRP data). Some data are also included from the National Postsecondary Student Financial Aid Study (NPSAS). Both of these data sources include students from 2-year and 4-year colleges. These data are utilized in Chapter 2.

Detailed Service Records. Each of the 28 participating institutions was asked to keep detailed service records of each service contact with sampled students. Records were kept for 2,632 freshmen and 2,109 nonfreshmen throughout the 1991-92 year. Data from these records are presented in Chapter 3.

Transcripts. Student transcripts were collected for all freshmen SSS participants for the 1991-92 school year. Preliminary data on course-taking patterns of SSS participants are presented in Chapter 4. These data will be used further in a subsequent report presenting findings from the longitudinal study of outcomes for SSS project participants. The report will include analysis utilizing a comparison group of students who did not receive SSS services.

Limitations of the Data. Baseline survey data presented in this report are based on student information obtained on 2,800 freshman students, and service record data are from 4,741 students from 28 projects. While this is a large number of sites for an indepth evaluation study, some caution should be taken in generalizing to the national population of SSS students.

2. A PROFILE OF STUDENT SUPPORT SERVICES FRESHMEN: 1991-92

Introduction

Who are the students receiving SSS services and how do they compare with other students at their own institutions and with freshman students nationwide? Data presented in this chapter to address this question are from two sources: student surveys completed by all freshman participants in the indepth study sample over the course of the 1991-92 academic year, and computer files from institutional student information systems on all fall 1991 freshman students at the sampled institutions. Appendix B includes a copy of the student questionnaire, and Appendix C includes a copy of the file request form. In addition, for some items national data were available for all college freshmen from either the Cooperative Institutional Research Program (CIRP) or the National Postsecondary Student Aid Study (NPSAS), and these data are included in this chapter.

Data Collection for Student Surveys. All freshmen from the sampled schools who began participating in the SSS project for the 1991-92 year up to March 30, 1992, were included in the survey sample. Since very few students began SSS participation for a given year after March, the sample essentially included all freshman participants from the sampled schools for the 1991-92 school year. The student surveys were completed by 88 percent of the freshman students served by the projects. Project staff were instructed to send lists of participants to the national study office on a flow basis as the students entered the program. Surveys for identified participants were then forwarded to the projects to distribute. Student participants then either returned the surveys in sealed envelopes to SSS project staff or mailed them directly to the national study office. Project-administered surveys were returned by about 60 percent of the sample. Beginning in the spring and continuing into the summer, Westat did direct followup of nonresponding participants by mail and telephone to bring the response rate up to 88 percent.

Data Collection for the Freshman Files. Participating sites were asked to provide as much information on all fall 1991 freshmen as was available on computerized files. A suggested format was sent to the student information services or institutional research office. The primary purpose of the freshman file collection was the selection of comparison students for the longitudinal study, which was done on a school-by-school basis; however, we have merged the data for descriptive purposes in this report.

Information Collected. Information collected on the student survey and freshman files included the following:

- **Background and demographic data**

  Age
  Gender
  Race/ethnicity
  Marital status and dependent children
  Handicapping conditions
  High school preparation for college
  Other federal program participation
  Standardized test scores
  Prior higher education experience
  Parental characteristics
  Family income
  Student dependency status
  Language spoken at home

- **College experience**

  Residence
  Intensity of involvement in college
  Financial aid
  Use of SSS and SSS-like services
  Self-reported grades and expected grades
  Integration to college life
  Education aspirations
  Satisfaction with college
  Career expectations
  Self-concept

Each of these topics is discussed in this chapter.

SSS Freshman Student Demographics

Data included in this section cover all 2-year, 4-year, and doctoral institutions in the indepth study

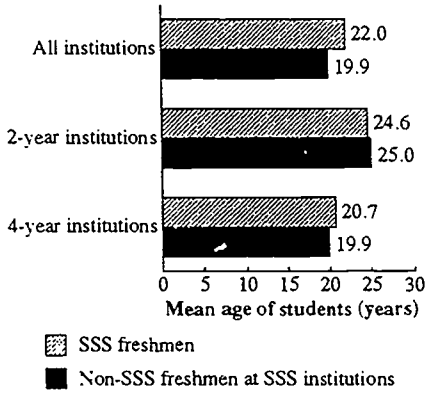
sample. Where sufficient data are available, comparisons are made with non-SSS students at the same institutions and to U.S. freshmen overall.

Age. Overall the majority of SSS freshman students were either 18 years old (39 percent) or 19 years (21 percent; Table 2-1). However, in 2-year institutions the percentages of SSS freshman who were 18 or 19 were substantially lower (17 and 15 percent, respectively); at these institutions, 56 percent of freshmen were over 20 years, compared with 31 percent overall, and 29 percent were at least 30 years old, compared with 14 percent overall.

In comparison with all freshmen nationwide, SSS participants were noticeably older than typical freshmen. Among all freshmen, approximately 90 percent were either 18 or 19, compared with 60 percent of SSS freshmen who were these ages.

On average, SSS freshman students were also older than non-SSS freshman students at the same institutions, with a mean age of 22.0 versus 19.9 years old as of January 1992. Thus, the differences between SSS freshman students and all freshmen reflect a real difference in student characteristics, and was not simply the result of which institutions had SSS projects (Figure 2-1). However, there were institutional differences as well. While Table 2-1 shows SSS freshmen at SSS 2-year institutions to be noticeably older than freshmen at all 2-year institutions, Figure 2-1 shows that the inclusion of non-SSS institutions is an important part of that statistic; if only SSS 2-year institutions are examined, the mean ages of SSS freshmen and non-SSS freshmen are roughly the same (about 25 years).

Figure 2-1. Mean age of Student Support Services (SSS) and non-SSS freshman students at sampled institutions: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Freshman File Data, 1991-92.*

Table 2-1. Percentage distribution of the age of Student Support Services (SSS) freshman participants and comparison with Cooperative Institutional Research Program (CIRP) data for all freshmen: 1991-92

Age	SSS freshman participants				All freshmen (CIRP) data		
	All institutions	2-year institutions	4-year institutions	Doctoral institutions	All institutions	2-year institutions	4-year institutions
17 or younger	1%	2%	1%	*	2%	2%	2%
18	39	17	43	57%	66	56	71
19	21	15	23	20	24	26	23
20	8	9	7	7	3	4	2
21-24	10	14	9	6	2	5	1
25-29	7	13	6	6	1	3	*
30-39	9	20	7	2	1	3	*
40 or older	5	9	4	1	*	1	*

*Less than .5 percent.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: SSS participant data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*; All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council on Education, *The American Freshman: National Norms for Fall 1991.*

Gender. There was a greater representation of female students in SSS programs than male students (Table 2-2). In fact, participation rates for women were almost double those for men. Overall among SSS freshman participants in our sample, 67 percent were female, a pattern that held in 2-year and 4-year institutions (Figure 2-2) and when institutions were compared by selectivity, size, and region (data not shown).

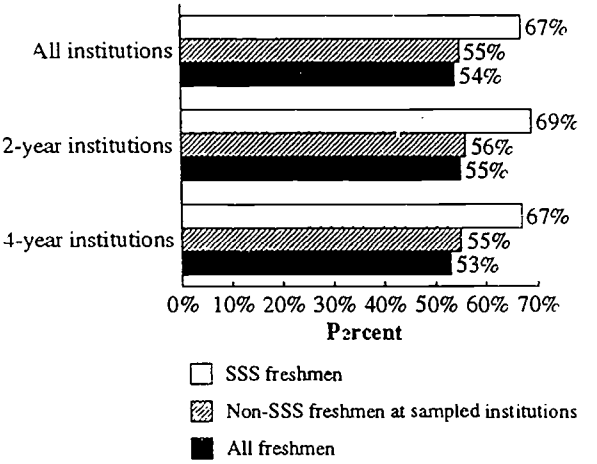
This large majority of female SSS freshman students was quite different from the pattern found for non-SSS freshman students at the same institutions, where freshmen were more evenly divided (55 percent female). The non-SSS students were divided in similar proportions to those found for all freshmen in the country (53 percent female); therefore, SSS students were at institutions with gender distributions similar to those nationwide, but SSS students themselves had different characteristics.

Table 2-2. Percentage distribution of gender of Student Support Services (SSS) freshman participants, non-SSS freshmen at sampled institutions, and all freshmen: 1991-92

Participants	Male	Female
SSS freshman participants		
Total	33%	67%
2-year	31	69
4-year	33	67
Non-SSS freshmen at sampled institutions		
Total	45	55
2-year	44	56
4-year	45	55
All freshmen (CIRP data)		
Total	47	53
2-year	45	55
4-year	46	54

SOURCE: SSS and non-SSS data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Freshman File Data*; All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council on Education, *The American Freshman: National Norms for Fall 1991.*

Figure 2-2. Percentage of Student Support Services (SSS) freshman students and other freshman students who are female: 1991-92



SOURCE: SSS and non-SSS data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Freshman File Data*; All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council on Education, *The American Freshman: National Norms for Fall 1991.*

Race/Ethnicity. Among all SSS freshman participants, white students were the largest racial/ethnic group (41 percent), and African-American students were the next largest (31 percent); there were also a sizable number (22 percent) of Hispanic students (Table 2-3). At 2-year institutions, African-American SSS students were the largest group (45 percent), and white students the next largest (36 percent). In contrast, among all U.S. freshmen, 80 percent were white, 9 percent were African-American, and 6 percent were Hispanic.

Although our sample included a number of historically black colleges and universities, overall the large proportion of minorities among SSS students distinguished the group from non-SSS students at the same institutions. Among the non-SSS students at sampled institutions, 74 percent were white (versus 41 percent among the SSS students); the percentages of African-American and Hispanic students were much lower than among SSS students (13 percent and 8 percent, respectively).

Table 2-3. Percentage distribution of the race/ethnicity of Student Support Services (SSS) freshman participants, non-SSS freshmen at sampled institutions, and all undergraduates: 1991-92

Participants	Race/ethnicity				
	Native American	African-American	Hispanic	Asian or Pacific Islander	White
SSS freshman participants					
Total	2%	31%	22%	4%	41%
2-year	2	45	14	2	36
4-year	2	25	27	4	42
Doctoral	4	34	11	6	45
Non-SSS freshmen at sampled institutions	1	13	8	5	74
2-year	1	13	7	4	75
4-year	1	12	9	6	73
All undergraduate (IPEDS data)					
Total	0.8	9	6	4	80
2-year	1.0	10	8	4	77
4-year	0.6	9	4	4	82

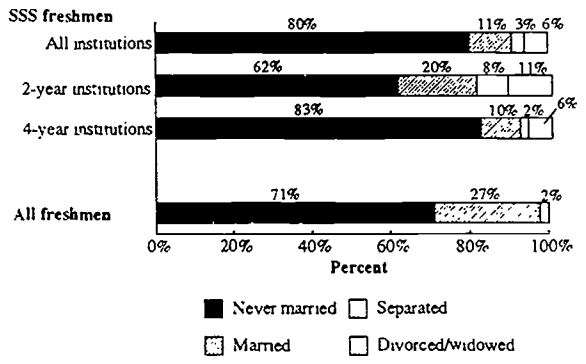
NOTE: Percentages may not add to 100 due to rounding.

SOURCE: SSS data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Baseline Survey Data and Freshman File Data, 1991-92*; Undergraduate data: U.S. Department of Education, National Center for Education Statistics, "Fall Enrollment in Colleges and Universities," and Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Survey.

Marital Status and Dependent Children. About 20 percent of the SSS participants had ever been married, including 11 percent that were currently married. As shown in Figure 2-3, students at 2-year institutions were more likely to be currently married (20 percent) than were students at 4-year schools (10 percent). Compared to freshmen overall, SSS participants were somewhat less likely to be married. Among all freshmen, 27 percent were married, 71 percent not married, and 2 percent were separated.

Overall about 22 percent of SSS freshman students had dependent children, which was roughly the same as for freshmen overall (24 percent; Figure 2-4). The mean number of children among these students was 2. Almost half of the SSS students (48 percent) at 2-year institutions had dependent children, a much higher percentage than for SSS students at 4-year institutions (16 percent). The high percentage of SSS students having dependent children has implications for the types of programs that may be most appropriate for SSS students at 2-year institutions, where home and work responsibilities mean that students spend little time on campus other than to attend class.

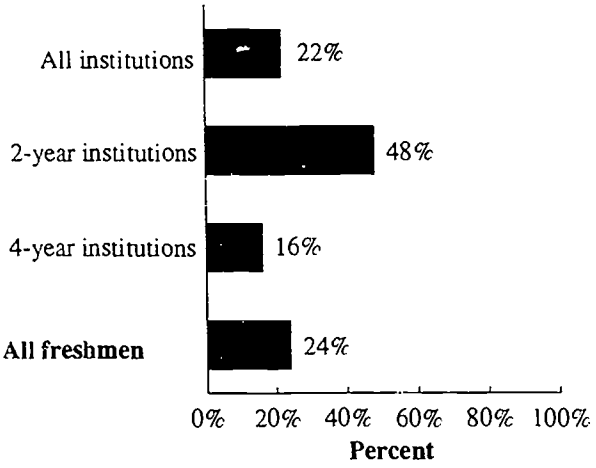
Figure 2-3. Marital status of Student Support Services (SSS) freshman students and all freshmen: 1991-92



NOTE: Percentages may not add to 100 due to rounding.

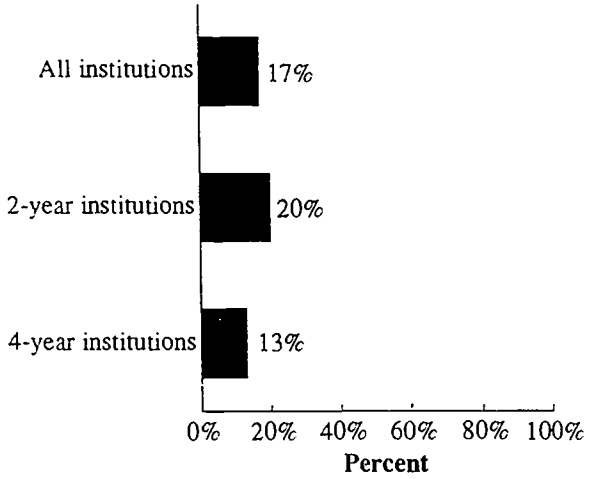
SOURCE: SSS students: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Baseline Survey Data, 1991-92*; All freshmen data: U.S. Department of Education, National Center for Education Statistics, 1989-90 National Postsecondary Student Aid Study (NPSAS:90), restricted file.

Figure 2-4. Percentage of Student Support Services (SSS) freshman students and all freshmen with dependent children: 1991-92



SOURCE: SSS participant data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*; All freshmen data: U.S. Department of Education, National Center for Education Statistics, 1989-90 National Postsecondary Student Aid Study (NPSAS:90), restricted file.

Figure 2-5. Percentage of Student Support Services (SSS) freshman students with some type of disability: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Baseline Survey, 1991-92*.

Handicapping Conditions. Overall, 17 percent of the SSS students reported having some type of disability (Figure 2-5). Students at 2-year colleges were more likely to report having a disability than were students at 4-year institutions (20 percent versus 13 percent). Among the types of disabilities reported, the frequencies ranged from 1 percent for speech disabilities to 6 percent for specific learning disabilities (Table 2-4). SSS students at doctoral institutions were most likely to report a specific learning disability, with 15 percent reporting this handicap.

Though the proportion of SSS students reporting each disability was small, it was usually higher than the proportion found among all freshmen. For example, 6 percent of SSS freshman students reported a specific learning disability, compared with 2 percent among all freshmen.

Table 2-4. Percentage of Student Support Services (SSS) freshman participants and of all freshmen having handicapping conditions: 1991-92

Handicapping condition	SSS freshmen				All freshmen (CIRP Data)		
	Institutions				Institutions		
	All	2-year	4-year	Doctoral	All	2-year	4-year
Specific learning	6%	7%	4%	15%	2%	4%	2%
Visual handicap	2	3	1	3	2	2	3
Hearing problem	3	3	2	3	1	1	1
Speech disability	1	2	1	1	1	1	0
Orthopedic	3	2	3	3	1	2	1
Other health-related	5	8	4	7	3	3	3

SOURCE: SSS participant data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*; All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council on Education, *The American Freshman: National Norms for Fall 1991*.

High School Preparation of SSS Freshman Students

This section presents data on SSS freshman students' high school academic preparation. The data covered include years since graduation, average grades in high school, course taking in high school, participation in programs in high school, other federal program participation, and standardized test scores.

Years Since Graduation. An overwhelming majority of SSS students (91 percent) received a high school diploma, while 9 percent obtained a GED, and 1 percent left high school without receiving a diploma (Table 2-5). However, in comparing students at 2-year institutions with those at all institutions, a lower percentage graduated from high school (78 percent versus 91 percent) and a higher percentage obtained a GED (19 percent versus 9 percent).

A slight majority of the SSS students in this study who received a high school diploma graduated from high school in 1991 (59 percent), and 20 percent graduated in 1988 or earlier. Consistent with the data shown earlier on the greater age of SSS students at 2-year institutions, these students also tended to graduate from high school at an earlier date; 34 percent graduated in 1988 or before, and only 31 percent graduated in 1991.

Comparisons of SSS student data with CIRP data on all freshmen showed that SSS students were less likely to have received a high school diploma than were all freshmen (91 percent versus 98 percent).

Average GPA in High School. The majority of SSS students reported having received a "B" average in high school (60 percent), while 29 percent had received a "C" average (Figure 2-6). Nine percent reported an "A" average and 1 percent a "D" average.

SSS freshman students were similar to all freshmen in that the majority of the students tended to have had a "B" average in high school. However, SSS students were more likely to have had a "C" average than all freshmen (29 percent versus 19 percent) and less likely to have had an "A" average (9 percent versus 24 percent).

Course Taking in High School. SSS students were asked how many years they had studied each of five subject areas during high school (grades 9-12). The average ranged from 0.6 for computer science to 3.3 for math (Table 2-6). For math and foreign languages, students at 2-year institutions

Table 2-5. Percentage of Student Support Services (SSS) and all freshman students graduating from high school and percentage distribution of year of graduation: 1991-92

High school graduation factor	SSS freshmen				All freshmen (CIRP data)		
	All institutions	2-year institutions	4-year institutions	Doctoral institutions	All institutions	2-year institutions	4-year institutions
Percent having high school diploma	91%	78%	93%	97%	98%	96%	99%
Year graduated from high school							
1991	59	31	64	75	91	82	95
1990	8	8	8	9	3	5	2
1989	4	5	3	2	1	2	1
1988 or earlier	20	34	18	11	3	8	2
High school equivalency/GED	9	19	6	4	2	4	1
Left high school	1	3	*	*	*	1	*

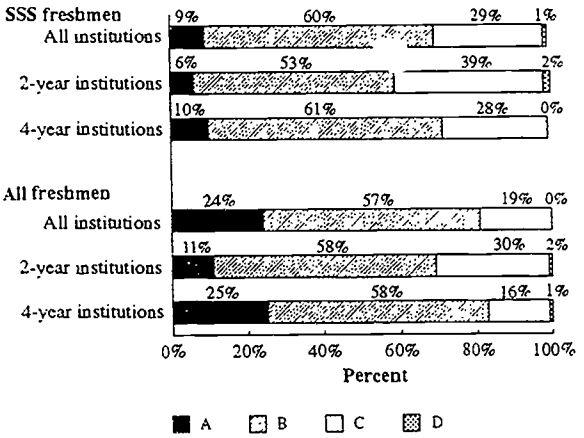
*Less than .5 percent.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: SSS participant data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*. All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council on Education, *The American Freshman: National Norms for Fall 1991*.

tended to have studied less years than those at all institutions (2.9 versus 3.3 years for math, and 1.1 versus 1.6 years for foreign languages).

Figure 2-6. High school grade point averages of Student Support Services (SSS) freshmen and all freshmen: 1991-92



NOTE: Percentages may not add to 100 due to rounding.

SOURCE: SSS participant data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*; All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council on Education, *The American Freshman: National Norms for Fall 1991*.

Table 2-6. Mean number of years of course taking in high school by Student Support Services (SSS) freshmen: 1991-92

Course	SSS participants			
	Institutions			
	All	2-year	4-year	Doctoral
Math	3.3	2.9	3.3	3.5
Foreign language	1.6	1.1	1.7	2.1
Physical science	1.6	1.4	1.5	1.9
Biological science	1.4	1.3	1.4	1.5
Computer science	0.6	0.3	0.6	0.7

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*.

Participation in Programs Prior to College. To help determine the preparation of SSS participants for college and past participation in supplemental services, students were asked about their participation in several types of programs either during high school or just prior to entering college (Table 2-7). Among all the programs, SSS students were most likely to have participated in visits to the college campus for orientation (70 percent). Other programs in which at least a fifth of SSS students had participated were admissions counseling (31 percent), volunteer work (24 percent), and tutoring in math (21 percent).

Table 2-7. Percentage of Student Support Services (SSS) freshmen participating in selected programs in high school: 1991-92

Program	SSS participants			
	Institutions			
	All	2-year	4-year	Doctoral
Summer programs (residential)	19%	5%	16%	26%
Summer programs (nonresidential)	5	3	5	5
Math tutoring	21	10	26	18
English tutoring	19	11	23	16
Tutoring in other subjects	11	6	14	10
College visits	70	50	75	79
College mentoring	16	8	18	20
Cultural enrichment	17	8	19	22
Volunteer work	24	16	25	29
Admissions counseling	31	25	33	35

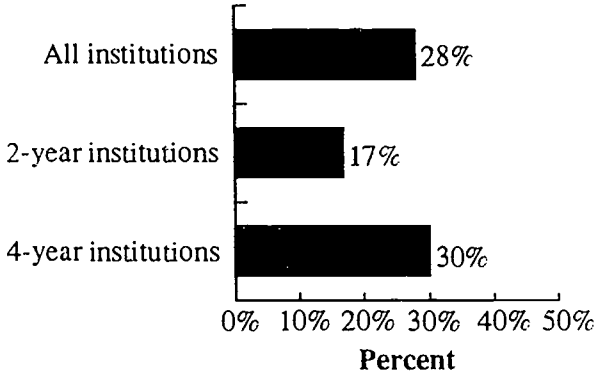
SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*.

For each program listed, students at 2-year institutions were somewhat less likely to have participated than students overall. For example, 50 percent of freshmen at 2-year institutions had participated in college visits, compared to 70 percent at all institutions.

Federal Program Participation. In addition to SSS, 28 percent of SSS participants reported that they had at some point participated in other federal programs (Figure 2-7). Students at 2-year institutions were much less likely to have participated in another program (17 percent) than students at 4-year institutions (30 percent). Among TRIO programs, about 6 percent of SSS freshmen

participated in Upward Bound, 4 percent in Talent Search, and 3 percent in Equal Opportunity Centers (Table 2-8).

Figure 2-7. Percentage of Student Support Services (SSS) freshmen who participated in any federal programs: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Table 2-8. Percentage of Student Support Services (SSS) freshman participants who reported participation in federal programs: 1991-92

Federal program	All institutions	2-year institutions	4-year institutions	Doctoral institutions
Upward Bound .	6%	3%	6%	10%
Talent Search . .	4	2	6	3
EOC	3	3	3	1
Other	15	9	15	23

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Standardized Test Scores. About 40 percent of SSS students at 2-year institutions and 88 percent at 4-year institutions reported having taken either the Scholastic Aptitude Test (SAT) or American College Testing (ACT) assessment. Data from the freshman files obtained from the institution indicated that SSS students averaged about 81 points lower on the verbal SAT and 89 points lower on the math SAT than other students at their institutions (Table 2-9). Mean scores reported in the freshman files for SSS students were 352 for the SAT verbal and 405 for the SAT math. Average scores for non-SSS students at the same institutions were 433 for SAT verbal and 494 for SAT math. National averages in 1991 were 422 for the SAT verbal and 474 for the SAT math. Mean ACT scores were 19 for SSS students compared with 22 for non-SSS students at the same institutions. Nationwide the ACT average score was 21.

Table 2-9. Mean standardized test scores (SAT and ACT) for SSS and non-SSS freshmen and for all freshmen: 1991-92

Participants	SAT Verbal	SAT Math	ACT Composite	Mean admission test percentile*
SSS participants				
Total	352	405	19	37
2-year . . .	331	388	15	26
4-year . . .	352	405	19	38
Non-SSS participants				
Total	433	494	22	52
2-year . . .	384	432	18	36
4-year . . .	433	494	23	52
All freshmen (national averages)	422	474	21	NA

* Represents percentile scored data on SAT, ACT, or other available admissions tests.

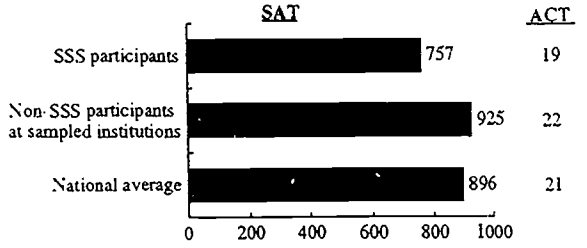
NA - Not applicable.

SOURCE: SSS data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Freshman File Data, 1991-92*; National SAT Scores: College Entrance Examination Board, *National Report on College-Bound Seniors*; National ACT Scores: ACT, *National Trend Data for Students Who Take the ACT Assessment.*

In summary, combined score SAT averages for SSS students were over 100 points lower than average scores for students at their institutions and nationwide (Figure 2-8). Freshman students at 2-year institutions tended to have lower SAT scores, in both verbal and math tests, than those at all institutions (Table 2-9). On the verbal test, SSS students at 2-year institutions were 21 points (331 versus 352) lower than SSS participants at all institutions, and on the math test, they were 17 points (388 versus 405) lower. The average ACT

scores were also lower for students at 2-year institutions (15 versus 19).

Figure 2-8. Mean SAT (verbal and math combined) and composite ACT scores for Student Support Services (SSS) freshmen, non-SSS freshmen at sampled institutions, and all freshmen: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Freshman File Data.*

Prior Higher Education Experience of SSS Freshman Students

This section depicts SSS students' prior higher education experience. Students were asked if they had attended other institutions. They also were asked the year in which they first received college credit after leaving high school.

Attendance at Other Institutions. While only freshman SSS participants were included in the sample, 30 percent of the SSS students reported they had taken college courses at some other institution since leaving high school (Table 2-10). Students split rather evenly among attending a junior or community college (11 percent), a 4-year college or university (11 percent), and some other postsecondary school (10 percent).

Students at 2-year institutions were somewhat more likely to have attended another institution than students at 4-year institutions (38 percent versus 26 percent), including at a junior/community college (18 percent versus 7 percent) or at some other postsecondary school (16 percent versus 9 percent; Table 2-10).

Year in which Student Received First College Credit. About 25 percent of SSS freshmen had received college credit prior to their enrollment in the fall 1991 term. Consistent with other data that students at 2-year institutions were often older than other SSS students, they were somewhat less likely to have received their first credit in 1991 (64 percent versus 74 percent), and more likely to have received credit in 1988 or earlier (22 percent versus 11 percent; Figure 2-9).

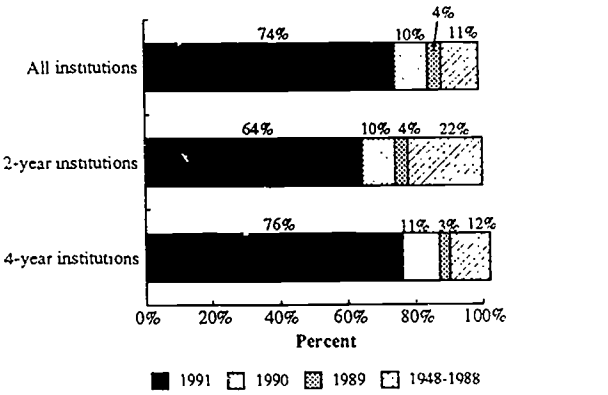
Table 2-10. Percentage of Student Support Services (SSS) freshmen ever attending postsecondary institutions other than their current institution since high school: 1991-92

Type of current institution	All institutions	2-year institutions	4-year institutions	Doctoral institutions
Any postsecondary . . .	30%	38%	26%	31%
Community college .	11	18	7	12
4-year	11	8	12	15
Other postsecondary	10	16	9	5

NOTE: Subtotals do not add to totals because students may have attended more than one type of institution.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Figure 2-9. Year in which Student Support Services (SSS) students received first college credit: 1991-92



NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Characteristics of Parents of SSS Freshmen

Family Members Living in Household. The most common family arrangement for SSS students was to have spent most of their time living with two parents (70 percent), while 24 percent lived with only their mother (or female guardian), 2 percent with only their father (or male guardian), and 4 percent with neither their father or mother (Table 2-11 and Figure 2-10). They were also very likely to live with brothers and/or sisters (85 percent). Students at 2-year institutions were less likely than those at 4-year institutions to have lived with both parents (65 percent versus 73 percent).

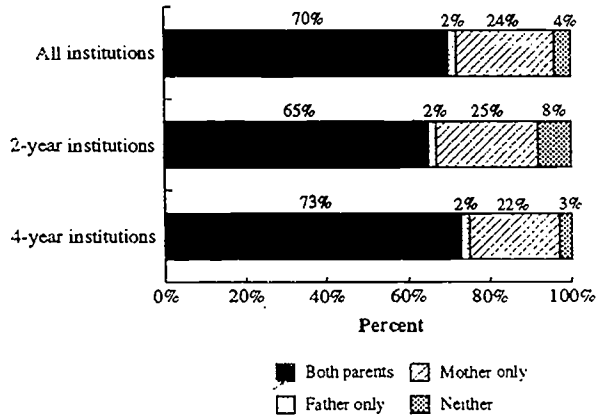
Table 2-11. Percentage of Student Support Services (SSS) freshmen having various family members who lived in their household while growing up: 1991-92

Family member	SSS participants			
	All institutions	2-year institutions	4-year institutions	Doctoral institutions
Both parents . . .	70%	65%	73%	67%
Father only	2	2	2	2
Mother only . . .	24	25	22	27
Neither father nor mother	4	8	3	3
Brother/sister . . .	85	83	85	84
Grandparents . . .	12	13	12	11
Other relatives . .	12	15	11	9
Nonrelative	4	5	4	4

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Parents' Occupation. The majority of SSS students' fathers worked in either the service occupations (34 percent) or the occupations of crafts/operators/laborers (31 percent; Table 2-12). Mothers of SSS students were also most likely to work in service occupations (50 percent). The next largest group was clerical/sales occupations (21 percent).

Figure 2-10. Family arrangements of Student Support Services (SSS) freshmen: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Table 2-12. Percentage distribution of occupations of parents of Student Support Services (SSS) freshmen: 1991-92

Parent occupation	SSS participants			
	All institutions	2-year institutions	4-year institutions	Doctoral institutions
Father's occupation				
Clerical/sales	7%	5%	7%	9%
Crafts/operators/laborers	31	31	32	26
Service/other	34	41	35	23
Manager/proprietor . . .	18	14	17	27
Professional/technical . .	8	8	7	15
Teachers	2	1	2	1
Mother's occupation				
Clerical/sales	21	16	22	26
Crafts/operators/laborers	6	7	6	4
Service/other	50	58	51	36
Manager/proprietor . . .	8	6	7	13
Professional/technical . .	10	9	9	16
Teachers	5	5	6	5

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Received Analysis, 1991-92*

Parent's Education. As would be expected from the eligibility criteria relating to being the first generation of a family to attend college, only 10 percent of fathers of SSS freshmen and 9 percent of mothers of SSS freshmen had completed college degrees (Table 2-13). Instead, 70 percent of SSS freshman students had fathers with an educational level of high school or less, and 67 percent had mothers with an educational level of high school or less.

Just under half (44 percent) of SSS students in 2-year institutions had fathers who had not completed high school, and 38 percent had mothers who had not completed high school. SSS students at doctoral institutions were much less likely to have fathers or mothers who had not completed high school (11 to 16 percent) and students at 4-year institutions were in between (32 to 36 percent).

Parents of SSS students were much less likely than parents overall to have received a college education. Nationwide, CIRP data indicate that about 41 percent of all freshman had fathers with a college degree and about 32 percent had mothers with a college degree (compared with 10 percent and 9 percent, respectively, among SSS students). Further, 62 percent had fathers with some postsecondary education (compared with 30 percent of SSS students.) Only 12 percent had fathers with less than a high school diploma and 9 percent had mothers with less than a high school diploma, compared with 35 percent of SSS fathers and 30 percent of SSS mothers.

Family Income. Among SSS students, about half (47 percent) came from families with annual family income of less than $15,000 (Figure 2-11), and 71 percent came from families with incomes of less than $25,000 (Table 2-14). Almost one-third (30 percent) had less than $10,000 annual family income. Only 13 percent of them were from families with annual incomes of $40,000 or over.

SSS students from 2-year institutions had even less family financial resources. Over half (58 percent) were from families with $15,000 or less of annual family income (compared with 46 percent of SSS students at 4-year schools), and 44 percent had incomes of $10,000 or less (compared with 27 percent of SSS students at 4-year institutions).

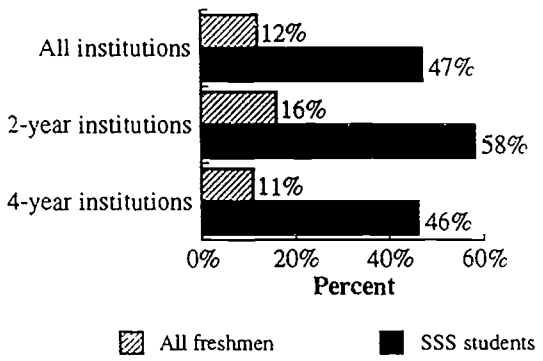
Table 2-13. Percentage distribution of Student Support Services (SSS) freshmen and of all freshman parents' educational level: 1991-92

Parents' educational level	SSS freshmen				All freshmen (CIRP data)		
	All institutions	2-year institutions	4-year institutions	Doctoral institutions	All institutions	2-year institutions	4-year institutions
Father's education							
Less than high school graduate	35%	44%	36%	16%	12%	18%	10%
High school graduate	35	31	36	36	28	37	26
Postsecondary	9	7	9	11	5	5	6
Some college	11	9	12	10	16	16	16
College degree	6	5	5	15	22	16	22
Graduate degree	4	3	3	11	19	9	21
Mother's education							
Less than high school graduate	30	38	32	11	9	13	8
High school graduate	37	34	38	35	34	42	32
Postsecondary	10	7	11	13	8	7	8
Some college	14	13	13	19	18	17	19
College degree	6	6	4	13	19	14	20
Graduate degree	3	2	2	8	13	7	14

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: SSS participant data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*; All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council on Education, *The American Freshman: National Norms for Fall 1991*.

Figure 2-11. Percentage of Student Support Services (SSS) freshmen and all freshmen with family incomes of $15,000 or less: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

A comparison of annual family income between SSS freshman students and all freshmen showed that SSS students had much more limited financial resources. Only 13 percent of SSS freshmen had family incomes of at least $40,000 (compared with 55 percent of all freshmen), while 47 percent had family incomes under $15,000 (versus 12 percent).

Student Dependency Status. The majority of SSS students (58 percent) reported that they had lived with their parents for more than five consecutive weeks in 1991, just under half (43 percent) were listed as a dependent on their parents' Federal Income Tax return, and slightly more than one-quarter (27 percent) reported having received assistance worth $600 or more from their parents (Table 2-15).

Table 2-15. Family dependency status of Student Support Services (SSS) freshmen: 1991-92

Dependency status	SSS freshmen			
	Institutions			
	All	2-year	4-year	Doctoral
Lived with parents	58%	46%	63%	55%
Listed as dependent	43	24	47	54
Received assistance of $600 or more from parents	27	13	29	38

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Data from the National Postsecondary Student Aid Study (NPSAS) indicate that for all undergraduates, about 48 percent were financially dependent on parents; however, among those 23 years or

Table 2-14. Percentage distribution of estimated household income of Student Support Services (SSS) freshman families and all freshman families: 1991-92

Family income	SSS freshmen				All freshmen (CIRP data)		
	All institutions	2-year institutions	4-year institutions	Doctoral institutions	All institutions	2-year institutions	4-year institutions
>$10,000	30%	44%	27%	22%	7%	9%	6%
$10,000 - $14,999	17	14	19	11	5	7	5
$15,000 - $19,999	14	12	15	11	5	7	5
$20,000 - $24,999	10	9	11	9	7	8	7
$25,000 - $29,999	9	9	8	13	7	9	7
$30,000 - $39,999	8	6	8	8	14	16	14
$40,000 - $49,999	6	3	6	9	14	15	14
$50,000 - $74,000	4	2	3	7	23	20	24
Over $75,000	3	1	2	9	18	10	18

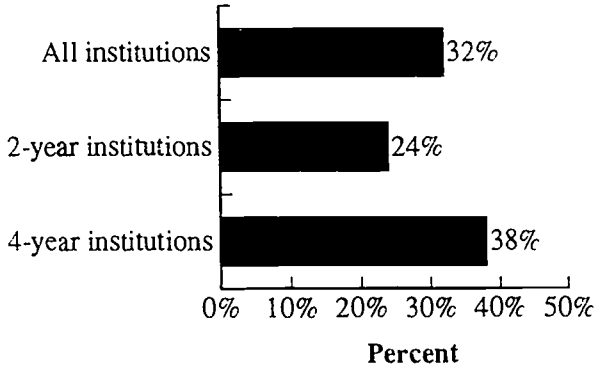
NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Baseline Survey, 1991-92*; All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council of Education, *The American Freshman: National Norms for Fall 1991.*

younger, 84 percent were dependent. SSS students at 2-year institutions tended to be more independent than those at all institutions. The percentages of students who lived with their parents for more than five consecutive weeks (46 percent), who were listed as a dependent on their parents' Federal Income Tax return (24 percent), and who received assistance worth $600 or more from their parents (13 percent) were relatively lower than those at all institutions.

Language Spoken in Home. About one-third (32 percent) of SSS students reported that another language besides English was spoken at home (Figure 2-12). SSS students at 2-year institutions were less likely to report any other language besides English spoken at home than those at 4-year schools (24 percent versus 38 percent).

Figure 2-12. Percentage of Student Support Services (SSS) freshman students with another language besides English spoken at home: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS) *Baseline Survey, 1991-92.*

Among the SSS students who had another language besides English spoken at home, the majority reported they could understand English very well (70 percent), speak English very well (59 percent), and read English very well (60 percent; Table 2-16). About half of them could write English very well (47 percent).

Table 2-16. Student Support Services (SSS) freshmen's knowledge of English: 1991-92

English language ability	SSS freshmen			
	All institutions	2-year institutions	4-year institutions	Doctoral institutions
Percentage speaking language other than English	32	24	38	21
	(Percentage distribution among those with another language besides English spoken in home)			
Understanding of English				
Not very well	3%	8%	2%	2%
Fairly well	6	14	4	*
Well	20	21	22	12
Very well	70	57	72	87
Speaking ability				
Not very well	4	11	2	*
Fairly well	12	18	12	2
Well	26	19	28	23
Very well	59	52	58	75
Writing ability				
Not very well	6	11	5	7
Fairly well	18	21	19	10
Well	28	22	31	20
Very well	47	46	45	63
Reading ability				
Not very well	5	9	4	2
Fairly well	10	15	9	7
Well	25	23	27	17
Very well	60	53	60	75

*Less than .5 percent.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

College Experience

Often students change their academic major while they are in college, so the majors that they choose as freshmen should be considered only as preliminary indicators of their academic interests. Still, their reports of their majors in the freshmen year can tell us much about the students' interests.

The most common major among the SSS freshman students was in health-related fields (18 percent), while 17 percent chose business, 11 percent chose education, and 11 percent chose social sciences (Table 2-17). However, students in 2-year colleges were different from this overall pattern, with 29 percent in health-related fields, and only 6 percent in the social sciences.

Table 2-17. Expected majors of Student Support Services (SSS) freshmen and all freshmen: 1991-92

Academic major	SSS freshmen			All freshmen		
	Institutions			Institutions		
	All	2-year	4-year	All	2-year	4-year
Arts and humanities	7%	5%	8%	8%	5%	11%
Biological science	5	3	5	4	2	5
Business	17	15	17	18	19	18
Education	11	8	13	10	8	13
Engineering	5	5	4	10	9	9
Physical sciences	2	1	2	2	1	3
Health-related fields	18	29	16	16	19	13
Social sciences	11	6	13	8	6	10
Other fields	18	21	16	17	27	10
Undecided	7	8	6	7	4	8

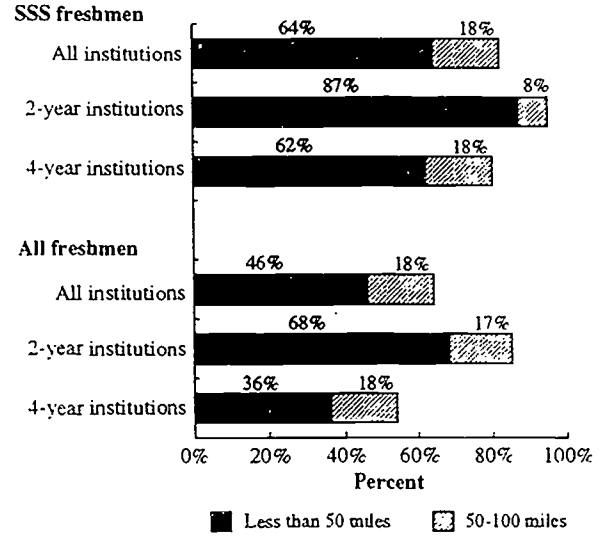
NOTE: Percentages may not add to 100 due to rounding.

SOURCE: SSS participant data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*; All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council on Education, *The American Freshman: National Norms for Fall 1991*.

SSS students showed only small differences in their academic interests when compared with freshmen across the country. They showed slightly greater interest in the social sciences (11 percent versus 8 percent), and less interest in engineering (5 percent versus 10 percent). It was the SSS freshmen at 2-year institutions who were most different from all freshmen at similar institutions, primarily through their strong interest in health-related fields (29 percent versus 19 percent).

Residence. SSS students tended to attend colleges that were relatively close to home, with 64 percent of students within 50 miles, and the remaining students relatively evenly split among those who were between 50 and 100 miles from home and those who were over 100 miles from home (Figure 2-13). This distribution was different from that for all freshmen. The CIRP survey showed only 46 percent of all freshmen attended colleges within 50 miles of home, while 18 percent were in schools within 100 miles from home (as was the case among SSS students).

Figure 2-13. Distance from college to home of Student Support Services (SSS) freshmen and all freshmen: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*; All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council on Education, *The American Freshman: National Norms for Fall 1991*.

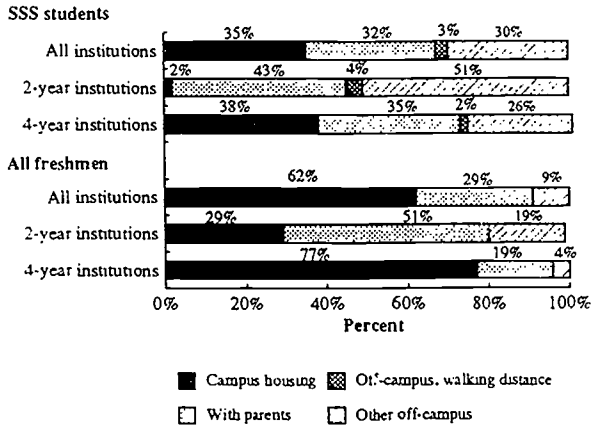
The SSS freshmen were most like students at 2-year institutions, for which CIRP data showed that 68 percent attended colleges within 50 miles from home (versus 64 percent of all SSS students). However, it is not accurate to say that all SSS students were similar to students at 2-year

institutions. The SSS students at 4-year institutions showed the greatest likeness (62 percent), while 87 percent of SSS students at 2-year institutions attended colleges within 50 miles from home.

Another way of looking at students' residences is to examine whether they lived on campus or in other types of housing. Just over one-third of SSS freshman students lived in college housing (35 percent), while a similar percentage lived with their parents (32 percent; Figure 2-14). The remaining students lived either away from the campus (30 percent) or in a private apartment or room within walking distance of the college (3 percent).

SSS participants at 2-year colleges had different housing arrangements from those overall, with only 2 percent living in college housing. Instead, students primarily either lived in a house or apartment away from the campus (51 percent) or with their parents (43 percent).

Figure 2-14. Housing arrangements of Student Support Services (SSS) freshmen and all freshmen: 1991-92



NOTE: On the bars for all freshmen the two categories for off-campus housing are combined. Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*; All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council on Education, *The American Freshman: National Norms for Fall 1991*.

Compared to all freshmen nationwide, SSS participants were less likely to live in campus housing (35 percent versus 62 percent), equally likely to live with parents (32 percent versus 29 percent), and more likely to live off-campus (33 percent versus 9 percent).

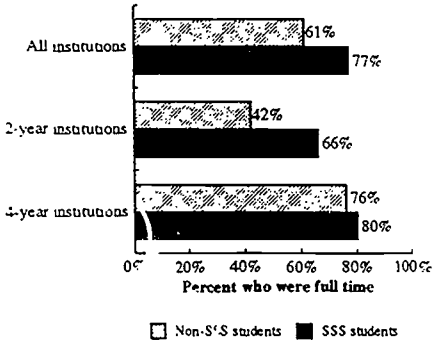
Intensity. This section will examine the intensity of SSS students' college enrollment in terms of their full-time/part-time status, their work status, and their hours spent on school work and studying.

The definition of full-time status is based on the number of credits taken in a term, and often does not include remedial classes. The perception of almost all of the SSS students was that they were full-time students (90 percent), with little difference between students at 2-year colleges (89 percent) and 4-year colleges (89 percent; not shown in tables). However, some students may have felt they were full time, but have included not-for-credit courses in their calculations. Institutional data, which could better account for the precise definition of full time, showed somewhat lower percentages of full-time students (77 percent; Figure 2-15), though the self-report of most students was confirmed. The institutional data also showed that SSS students were more likely to be full time than the rest of the students at the institution. This was true both overall (77 percent versus 61 percent) and for 2-year institutions (66 percent versus 42 percent); at 4-year institutions, the difference was much smaller (80 percent versus 76 percent). Unlike the self-reports, the institutional data also showed that SSS students at 2-year colleges were less likely to be full time (66 percent) than were SSS students at all institutions (77 percent).

Though most SSS students were full time, roughly half (49 percent) also worked while school was in session, most often through off-campus jobs (30 percent), but also through work-study (16 percent), or on-campus jobs that were not work-study (3 percent; Figure 2-16). Differences between students at 2-year colleges and those at 4-year colleges were relatively minor, except that students at 4-year colleges were somewhat more likely to be working (51 percent versus 46 percent), with the difference coming through their greater

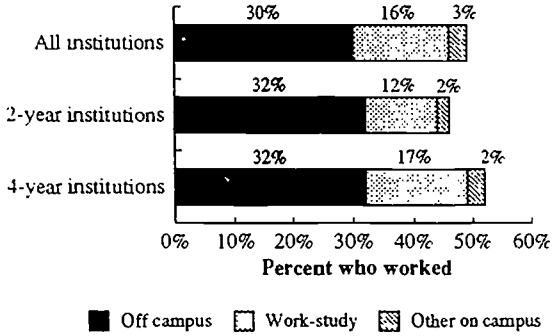
participation in work-study (17 percent versus 12 percent).

Figure 2-15. Percentage of Student Support Services (SSS) and non-SSS freshman students who were full-time students: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Freshmen File Data, 1991-92.*

Figure 2-16. Percentage of Student Support Services (SSS) freshmen who worked while school was in session: 1991-92

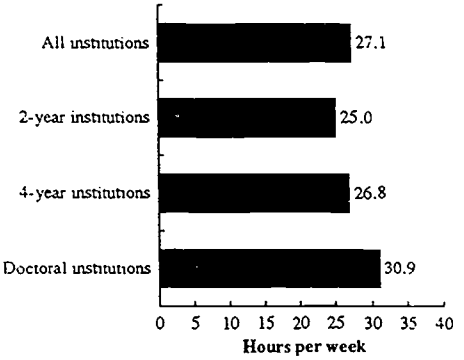


SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Time Spent on School Work. The SSS students reported that they spent a mean of 27.1 hours per week on school work, including time spent in class and time spent studying (Figure 2-17). Consistent with their lower likelihood of being full time, students in 2-year colleges spent slightly less time per week (25.0 hours) than students in 4-year colleges (26.8 hours) or students at doctoral institutions (30.9 hours).

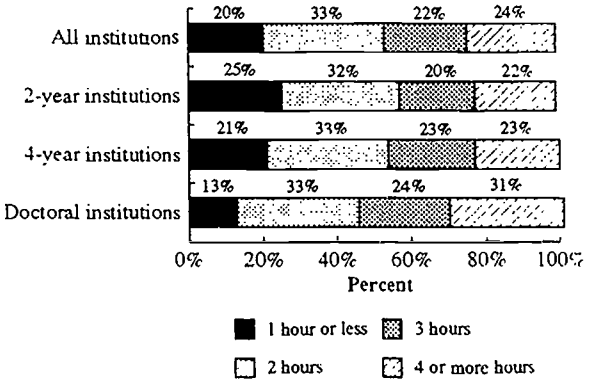
Per day, the most common response among SSS students was that they spent 2 hours on studying outside of class (33 percent), while 22 percent spent 3 hours per day, and 24 percent spent 4 hours or more per day (Figure 2-18). Only 16 percent spent 1 hour per day, and 4 percent spent less than 1 hour. The differences between students at 2-year colleges and those at 4-year colleges were not large. At doctoral institutions, students were more likely to spend 4 or more hours per day on studying (31 percent versus 24 percent overall) and less likely to spend 1 hour or less (13 percent versus 20 percent).

Figure 2-17. Number of hours Student Support Services (SSS) freshmen spent per week on school activities, including time in class: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Figure 2-18. Number of hours Student Support Services (SSS) freshmen spent per day on studying outside of class: 1991-92



NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Time Spent Working at Job. Another way of examining a student's time available for studying is to look at the amount of time required for working. Roughly half of the SSS students (51 percent) reported that, on average, they had not worked any hours per week over the last academic year (Table 2-18). Close to the same amount (47 percent) reported that they worked 6 hours or more per week, and 29 percent reported that they worked 16 hours or more per week.

Table 2-18. Number of hours Student Support Services (SSS) freshmen and all freshmen spent per week on job: 1991-92

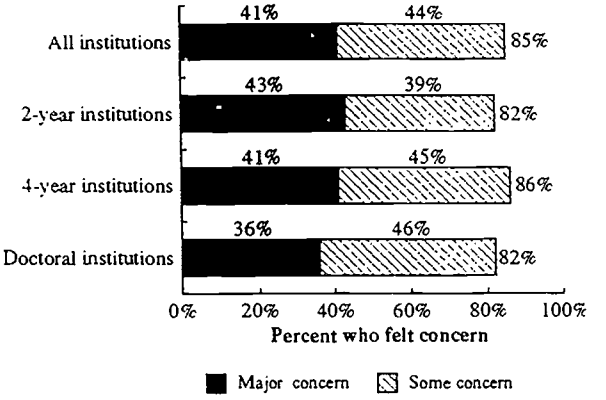
Hours per week	SSS freshmen			All freshmen (CIRP)		
	Institutions			Institutions		
	All	2-year	4-year	All	2-year	4-year
None	51%	54%	48%	27%	22%	29%
6 or more	47	44	49	60	64	59
16 or more	29	35	30	37	43	34

SOURCE: SSS participant data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*; All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council on Education, *The American Freshman: National Norms for Fall 1991.*

SSS students tended to work fewer hours per week than freshmen overall. Among all freshmen, 60 percent worked 6 hours or more (compared with 47 percent among SSS students), and 37 percent worked 16 hours or more (compared with 29 percent). The difference was greater for students at 2-year institutions (64 percent of all freshmen worked 6 hours or more, versus 44 percent of SSS freshmen) than at 4-year institutions (59 percent versus 49 percent). This may be related to the fact that a higher proportion of SSS participants are full-time students.

Financial Aid. Financing their college education represented a significant issue for SSS students. Only 16 percent were confident that they would have sufficient funds, while 44 percent indicated some concern (though they thought they probably would have enough funds), and 41 percent indicated a major concern that they would not have enough funds (Figure 2-19). Generally, the level of SSS students' concern did not vary greatly based on the type of institution they attended: the proportion feeling major concern or some concern ranged only from 82 percent to 86 percent.

Figure 2-19. Percentage of Student Support Services (SSS) freshmen who felt concern about their ability to finance their college education: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

SSS students used a variety of sources to finance their educational expenses for 1991-92. The most common sources were parents or other friends and relatives (50 percent), institutional grants or scholarships (50 percent), other grants or scholarships (40 percent), a job during the school year (38 percent), a summer job (34 percent), and personal savings (34 percent; Table 2-19). SSS students at 2-year colleges were generally less likely to use each source of funds except for two -- a job during the school year and a spouse -- which they used with about equal frequency as SSS students overall. Some of the greatest differences for students at 2-year colleges were in funds from parents, other relatives, or friends (36 percent versus 50 percent overall), summer jobs (19 percent versus 34 percent), government loans (16 percent versus 28 percent), and personal savings (23 percent versus 34 percent). These differences may indicate both the generally lower financial cost of education at 2-year colleges and the greater reliance on just a few sources for meeting all of their financial needs. Students at doctoral institutions

followed essentially the same trend, being even more likely to get funds from multiple sources, and more likely to get funds from most categories than students at either 2-year or 4-year institutions.

Table 2-19. Percentage of Student Support Services (SSS) freshmen who used various sources to finance their educational expenses for 1991-92

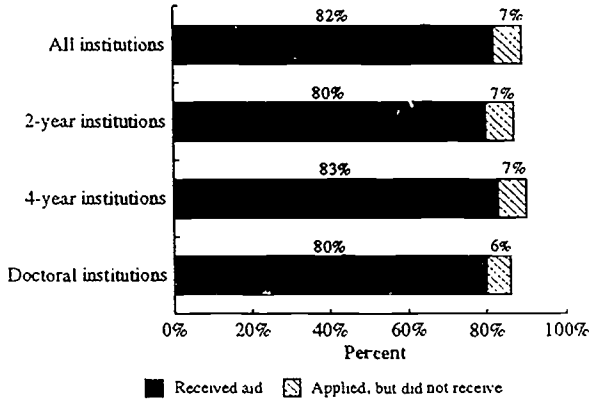
Source	All institutions	2-year institutions	4-year institutions	Doctoral institutions
Parents, other relatives, or friends	50%	36%	52%	60%
Spouse	7	10	7	2
Personal savings	34	23	33	47
Job during school year	38	36	38	39
Summer job	34	19	35	48
Institutional grants or scholarships	50	44	50	57
Other grants/ scholarships	40	31	42	42
Government loans	28	16	30	39
Other loans	16	7	17	22

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Use of Financial Aid. The great majority of SSS students (82 percent) both applied for and received financial aid, while 11 percent neither applied for nor received aid, and 7 percent applied for aid but did not receive it (Figure 2-20). Essentially the same proportions of SSS students received aid at each of the three types of institutions.

The percentage of SSS freshmen who received financial aid (82 percent) was almost double that of non-SSS freshmen at the sampled institutions and the national average for undergraduates (about 42 to 45 percent; Table 2-20). The mean amount of aid was not greatly different from that for non-SSS freshmen at the sampled institutions ($4,832 versus $4,415), but was somewhat more than for all undergraduates ($3,305 to $4,158, depending on the students' dependency status).

Figure 2-20. Percentage of Student Support Services (SSS) freshmen who reported they ever applied for and received financial aid: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

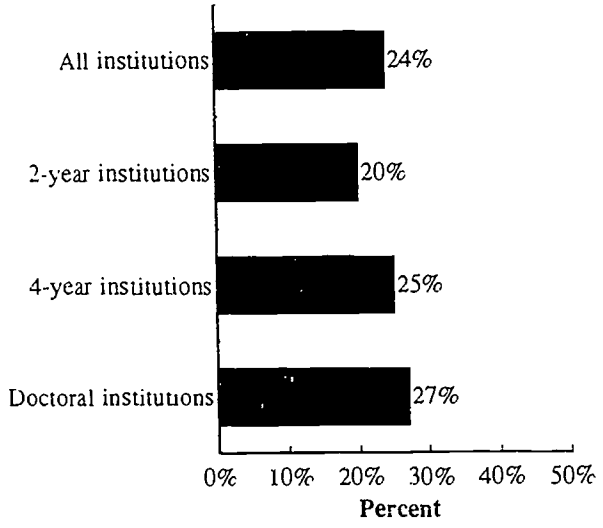
Table 2-20. Percentage of Student Support Services (SSS) freshmen and non-SSS freshmen who received financial aid and mean amount of aid: 1991-92

Recipient of aid	Percentage receiving aid	Mean amount of aid for those receiving aid
SSS freshmen (1991-92)		
Total	82%	$4,832
2-year	71	3,581
4-year	83	5,064
Non-SSS freshmen (1991-92) at sampled institutions		
Total	43	$4,415
2-year	32	2,086
4-year	51	4,414
All undergraduates (1989-90)		
Dependent fall enrollees	45	$4,158
Independent fall enrollees	42	$3,305

SOURCE: SSS and non-SSS freshmen data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Freshman File Data, 1991-92*; All undergraduates: U.S. Department of Education, National Center for Education Statistics, *Profile of Undergraduates in U.S. Postsecondary Education Institutions: 1989-90*, NPSAS data, MPR Associates Contractor Report, Laura Horn and Aziza Khazzoom.

Work-Study Participation. Roughly one-fourth of SSS students were currently participating in a work-study program at their school (Figure 2-21). Overall, 24 percent participated in work-study, with participation being highest among students at doctoral institutions (27 percent).

Figure 2-21. Percentage of Student Support Services (SSS) freshmen who were participating in work-study: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Self-reported Use of SSS-like Services. The baseline survey asked students how often they planned to use selected SSS-like services. These services were not specifically identified as SSS services, so they should be thought of as services from any source. Certain types of SSS-like services were widely used by SSS students. The services that the most students used were student orientation (59 percent), tutoring (55 percent), individual counseling (43 percent), classroom instruction in developmental math (21 percent), classroom instruction in developmental English (20 percent), and classroom instruction in basic skills (19 percent; Table 2-21). Except for student orientation and cultural enrichment, which were used by relatively fewer students in 2-year colleges than in 4-year colleges, there generally were not large differences between students at the two types of colleges.

Table 2-21. Percentage of Student Support Services (SSS) students who reported using SSS-like services: 1991-92

Service	Have used this service			Plan to use service		
	Institution			Institution		
	All	2-year	4-year	All	2-year	4-year
Services for disabled	3%	4%	2%	6%	7%	6%
Limited English	3	5	2	6	9	6
Student orientation	59	59	61	14	18	13
Individual counseling	43	37	44	48	46	49
Group counseling	12	8	12	20	14	21
Re-entrance counseling	5	6	5	11	16	10
Tutoring	55	51	54	69	67	69
Basic skills	19	22	21	17	19	17
Developmental English	20	24	21	20	22	22
Developmental math	21	22	22	25	21	27
Cultural enrichment	16	6	17	31	20	35
Referrals to agencies	14	9	13	29	26	29

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Students generally were as likely or more likely to expect to use the services in the future as they were to have used them in the past, with the exception of student orientation, which many fewer expected to attend later (14 percent versus 59 percent for past use). Some of the services where the greatest increases in use were anticipated were cultural enrichment (31 percent versus 16 percent), referrals to health, employment, housing, and legal agencies and resources (29 percent versus 14 percent), and tutoring (69 percent versus 55 percent). Students at 2-year colleges had roughly similar expectations for their future use of services as students at 4-year colleges, except that they were somewhat more likely to plan to attend student orientation (18 percent versus 13 percent) and college re-entrance counseling (16 percent versus 10 percent), and less likely to plan to use group counseling (14 percent versus 21 percent) and cultural enrichment (20 percent versus 35 percent).

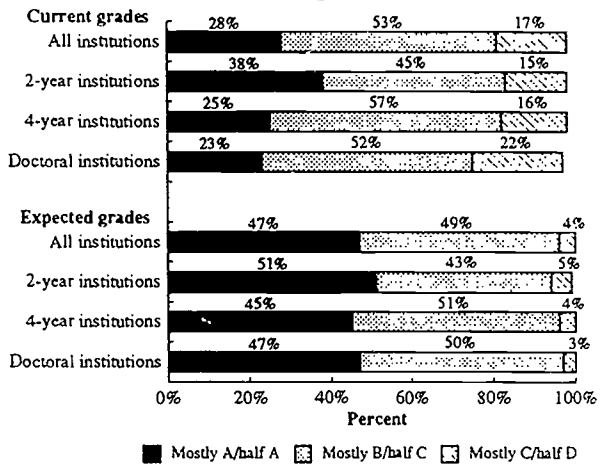
The data on service use and expected use generally parallels the results of the service record data, except in the area of counseling where a smaller percentage of students indicated use (see Chapter

3). This is apparently because students did not see academic advising as a form of counseling.

Self-reported Grades and Expected Grades. Most SSS students described their grades in their current term as being either mostly B's or about half B's and half C's (53 percent; Figure 2-22). The next largest group described their grades as either mostly A's, or about half A's and half B's (28 percent), while 17 percent described their grades as either mostly C's or half C's and half D's. Students at 2-year colleges tended to describe themselves as having higher grades, with 38 percent claiming either mostly A's or half A's and half B's, compared with 23 percent to 25 percent among students at 4-year colleges and doctoral institutions.

The grades that students expected on graduation were somewhat higher on average than the grades they were currently receiving. Almost half (47 percent) predicted their grades would be either mostly A's or half A's and half B's, compared with 28 percent in describing their current terms. Again, students at 2-year colleges described their grades more favorably than those at 4-year colleges, with 51 percent predicting either mostly A's or half A's and half B's, compared with 45 percent to 47 percent of those at 4-year colleges and doctoral institutions.

Figure 2-22. Self-reports by Student Support Services (SSS) students of their current and expected grades: 1991-92



NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Integration into College Life. The SSS students were asked about their frequency of participation in a number of college-related activities, ranging from their contacts with faculty and advisors to their participation in a variety of campus events (Table 2-22). The activities that clearly stood out as most

Table 2-22. Percentage of Student Support Services (SSS) freshmen who expected to perform selected activities either often or sometimes during fall 1991

Activity	Total		2-year		4-year	
	Often	Some-times	Often	Some-times	Often	Some-times
Talk with faculty about academic matters in their offices	21%	50%	17%	48%	20%	50%
Meet with your advisor concerning your academic plans	32	46	28	42	33	46
Have informal or social contacts with your advisor or other faculty members	17	40	14	40	17	40
Participate in study groups with other students outside of the classroom	28	42	22	41	28	42
Go places such as concerts, movies, restaurants, sporting events, etc., with friends from the school	36	38	20	41	38	38
Participate in one or more student assistance centers or programs (e.g., counseling programs, the learning skills center, minority student services, health services)	17	33	19	31	15	33
Participate in school clubs (e.g., student government, religious clubs, service activities)	15	25	9	25	15	24
Attend career-related lectures, conventions, or field trips with friends	12	37	10	37	13	37
Participate in and practice with others for intramural or intercollegiate music, drama, choir, etc.	8	15	4	13	8	16
Participate in and practice with others for intramural or intercollegiate sports	13	18	8	17	13	17

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

likely for students to perform often were going places such as concerts or movies with friends from the school (36 percent), meeting with their advisor concerning their academic plans (32 percent), and participating with other students in study groups outside of the classroom (28 percent).

Although the differences between students at 2-year colleges and those at 4-year colleges were generally small, if those students who often performed an activity are combined with those who sometimes performed it, the differences are enhanced, with students typically more likely to perform each activity at 4-year colleges than at 2-year colleges. Some of the largest differences were in going places such as concerts or movies (76 percent at 4-year colleges, versus 61 percent at 2-year colleges), participating in study groups (70 percent versus 63 percent), and meeting with advisors (79 percent versus 70 percent).

Educational Aspirations and Expectations. When asked to describe the highest degree they planned to obtain at the college they were currently attending, most SSS students (51 percent) planned on a bachelor's degree, while 24 percent planned on an associate's degree, 12 percent on a master's, 4 percent on a doctorate, and 2 percent on a vocational certificate (Table 2-23). The remaining 8 percent did not plan on receiving any degree or certificate from that college.

To a large extent, the degree expected depended on the type of college being attended. Though some 2-year colleges do offer a small number of bachelor's or higher degrees, most offer no degree higher than an associate's degree; thus, it is not surprising that most of the SSS students at 2-year colleges (69 percent) expected that an associate's degree would be the highest degree they would earn at that college. The estimate of 14 percent who anticipated a bachelor's degree or higher from that college is actually somewhat less than the comparable percentage from the CIRP data on all freshmen at 2-year colleges (19 percent), and thus

Table 2-23. Highest degree planned by Student Support Services (SSS) freshmen and all freshmen at their current college and anywhere: 1991-92

Highest degree planned	SSS freshmen				All freshmen (CIRP data)			
	All institutions	2-year institutions	4-year institutions	Doctoral institutions	All institutions	2-year institutions	4-year institutions	Doctoral institutions
Current College								
None	8%	11%	8%	5%	4%	8%	3%	1%
Vocational certificate	2	5	*	1	3	6	1	*
Associate's	24	69	12	4	26	67	3	1
Bachelor's	51	8	65	61	49	14	73	63
Master's	12	5	12	21	13	2	16	24
Doctorate	4	1	3	8	5	3	5	11
Any College								
None	3	6	3	1	1	2	1	1
Vocational certificate	1	2	*	1	2	5	*	*
Associate's	5	13	4	1	7	20	1	*
Bachelor's	27	36	27	15	28	33	28	21
Master's	36	24	38	45	36	27	40	40
Doctorate	27	20	27	37	26	13	29	38

* Less than .5 percent.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: SSS participant data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*; All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council on Education, *The American Freshman: National Norms for Fall 1991*.

should not be considered contradictory with the nature of 2-year colleges; it also may include students who anticipated receiving a higher degree from the same state system, especially if the 2-year college provided for an automatic transfer to a 4-year college at a later date. At 4-year colleges, most SSS students (65 percent) anticipated receiving a bachelor's degree from that college, while 15 percent listed higher degrees and 12 percent listed lower degrees. Students at doctoral institutions were almost as likely to anticipate a bachelor's degree from that college (61 percent), although a greater proportion anticipated a graduate degree than at 4-year institutions (29 percent versus 15 percent).

Often, students' ultimate aspirations extended far beyond their plans for the colleges they were currently attending. One reason is that the students may have been attending a college that did not offer the degree or specialization that was ultimately desired, while another is that students often transfer at some point in their undergraduate career. Thus, while only 16 percent planned to receive a graduate degree at the same college, most of the SSS students ultimately intended to receive a graduate degree, with 27 percent planning on a doctorate and 36 percent planning on a master's degree. Or, from a different perspective, 34 percent planned on receiving no degree higher than an associate's degree at the same college, but only 9 percent said this in terms of the degree they ultimately expected from any college.

Again, there were substantial differences between students at 2-year colleges, 4-year colleges, and doctoral institutions, indicating that the differences noted earlier were not only a reflection of the level of degree offered, but also of a difference in student aspirations. Students who were at 4-year colleges were more likely to plan on a graduate degree than those at 2-year colleges (65 percent versus 44 percent), while students at 2-year colleges were more likely to plan stopping their education before receiving a bachelor's degree (21 percent versus 7 percent). SSS students at doctoral institutions were the most likely to plan on a graduate degree (82 percent).

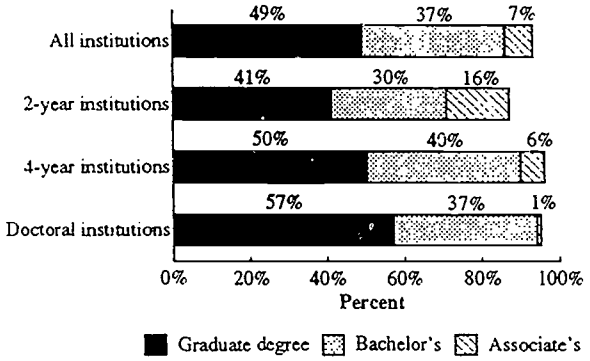
A different way of examining the aspirations of SSS students is to compare them with those of all freshmen throughout the country. By this criterion, SSS students were much like students overall. For example, 49 percent of all freshmen planned to receive a bachelor's degree as the highest degree from their current college, compared with 51 percent among SSS students; 26 percent planned on an associate's degree, compared with 24 percent. However, SSS students at 4-year colleges showed some stronger differences from the national data: they were somewhat less likely to expect a bachelor's degree at the same college (65 percent versus 73 percent) or a higher degree (15 percent versus 21 percent), and more likely to anticipate an associate's degree (12 percent versus 3 percent) or no degree (8 percent versus 3 percent).

SSS students were also like students overall in their ultimate aspirations at any college. However, this overall finding masks some differences based on what type of colleges the students were attending. SSS students at 2-year colleges were more likely than all students at 2-year colleges to expect a doctorate degree (20 percent versus 13 percent), and more likely to expect a bachelor's degree or higher (80 percent versus 73 percent). They were less likely to expect to stop with an associate's degree (13 percent versus 20 percent). SSS students at 4-year colleges were somewhat more likely than all students at 4-year colleges to plan to stop short of a bachelor's degree (7 percent versus 2 percent).

Parents' Aspirations. The aspirations of the SSS students were somewhat higher than the goals they perceived their parents had for them. Thus, while 63 percent of SSS students expected to receive a graduate degree, a somewhat lower percentage of students (49 percent) reported that their parents had that goal for them (Figure 2-23). SSS students at 4-year colleges reported higher aspirations by their parents than did SSS students at 2-year colleges, with 50 percent of SSS students reporting that their parents desired a graduate degree for them (versus 41 percent at 2-year colleges), and 90 percent reporting their parents desired a bachelor's degree or higher for them (versus 71 percent). Parents of students at 2-year colleges often expected only a vocational certificate (23 percent, versus 6 percent at 4-year colleges) or associate's degree (16 percent versus 6 percent). Parents of SSS students at doctoral institutions had the highest aspirations,

with 57 percent expecting a graduate degree.

Figure 2-23. Highest degree expected of Student Support Services (SSS) students by their parents: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Reasons for Attendance. The primary reason that SSS students gave for attending their college was to gain skills necessary to enter a career or occupation (66 percent; Table 2-24). Other reasons were to prepare for transfer to a 4-year college or university (17 percent), to satisfy their personal interest (10 percent), to retrain or advance in their current occupation (4 percent), and to improve English, reading, or math skills (3 percent). Students at 2-year colleges were somewhat different from the overall pattern in frequently indicating that their reason was to prepare for transfer to a 4-year college (40 percent).

Reasons for Leaving College. To further examine SSS students' desire to obtain a degree, they were told on the questionnaire that about 50 percent of university students typically leave before receiving a degree, and were asked what would be the most likely cause if that should happen to them. A total of 34 percent responded that they were absolutely certain they would obtain a degree, while the next largest group (29 percent) said the cost of education might be the primary deterrent (Figure 2-24). Other reasons that were given were to accept a good job or enter military service (16 percent), a lack of academic ability or study skills (7 percent), or other reasons such as marriage or disinterest in study (14 percent). Students at 4-year colleges were more likely than students at 2-year institutions to indicate a problem due to finances (33 percent versus 21 percent).

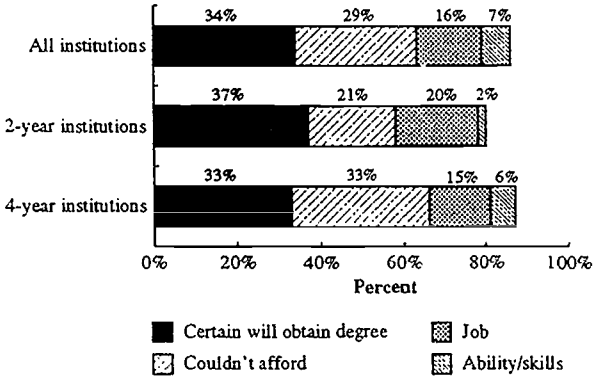
Table 2-24. Primary reason Student Support Services (SSS) students gave for attending their college: 1991-92

Primary reason	All institutions	2-year institutions	4-year institutions	Doctoral institutions
Transfer to another institution	17%	40%	10%	8%
Enter a career . .	66	48	72	69
Retain a career .	4	2	5	3
Personal interest	10	5	11	18
Improve skills . .	3	4	3	2

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Figure 2-24. Main reason why Student Support Services (SSS) students would leave without obtaining a degree: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

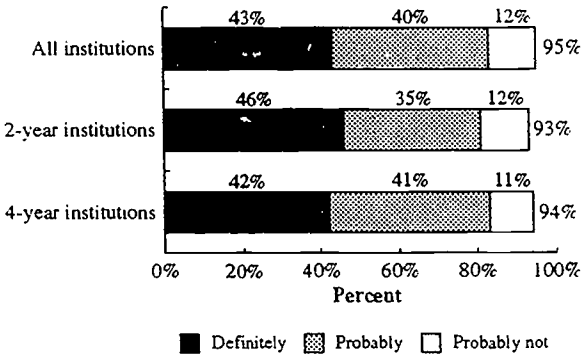
When predicting what might happen during and after their college attendance, SSS students said there was a very good chance they might get a bachelor's degree (68 percent), find a job after college in the field for which they were trained (65 percent), make at least a "B" average (51 percent), and work at an outside job during college (51

percent; Table 2-25). Students at 2-year colleges gave very similar responses to those overall, except that they were less likely to say there was a very good chance they would obtain a bachelor's degree (50 percent versus 68 percent overall).

In some ways, SSS freshmen were different from all freshmen across the nation. SSS students were more optimistic about their expected grades than freshmen overall, with 51 percent expecting at least a "B" average, versus 42 percent overall. However, though they were more positive in this area, they also gave several responses that were consistent with feeling financial pressures: they were more likely to expect to have to work at an outside job during college (51 percent versus 23 percent) and to need extra time to complete their degree requirements (28 percent versus 9 percent). Even after college, they were somewhat less likely to expect to find a job in the field for which they were trained (65 percent versus 71 percent).

Satisfaction with College. The great majority of the SSS students said that, if they were to start over again, they would still attend the same college, with 43 percent saying they would definitely attend the same college, and 40 percent that they probably would do so (Figure 2-25). An additional 12 percent expressed some doubt, and 6 percent said they would definitely not attend the same college. Responses for students at 2-year colleges and 4-year colleges were relatively similar.

Figure 2-25. Percentage of Student Support Services (SSS) students who would still attend the same college if they were to start over again: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*.

SSS students were positive in describing how they liked college: 45 percent were enthusiastic about it, and another 44 percent said they liked it (Figure

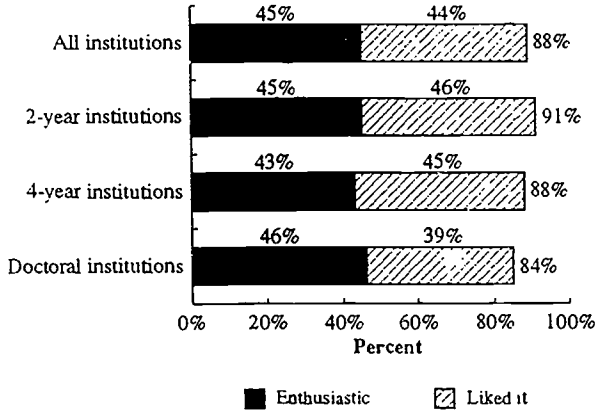
Table 2-25. Percentage of Student Support Services (SSS) freshmen and all freshmen that said there was a very good chance that various activities would occur

Activity	SSS freshmen			All freshmen (CIRP data)		
	All institutions	2-year institutions	4-year institutions	All institutions	2-year institutions	4-year institutions
Change major field	12%	11%	12%	12%	7%	13%
Fail one or more courses	5	5	4	2	2	1
Make at least "B" average	51	49	52	42	36	43
Need extra time for degree	28	27	28	9	8	9
Work at outside job	51	50	53	23	30	20
Get bachelor's degree	68	50	72	64	41	76
Drop out temporarily	5	5	5	1	1	1
Drop out permanently	1	2	1	1	1	1
Transfer to another college	17	20	17	13	20	11
Find a job in own field	65	63	67	71	70	71
Marry while in college	8	9	8	7	8	7

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*; All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council of Education, *The American Freshman: National Norms for Fall 1991*.

2-26). Of the remainder, 11 percent were neutral, and 1 percent did not like it. Again, there was little difference between students at 2-year colleges and 4-year colleges in their responses. However, students at doctoral institutions were roughly as likely to be enthusiastic about college (46 percent), but slightly less likely to like it (39 percent versus 44 - 46 percent).

Figure 2-26. Percentage of Student Support Services (SSS) students who liked college: 1991-92



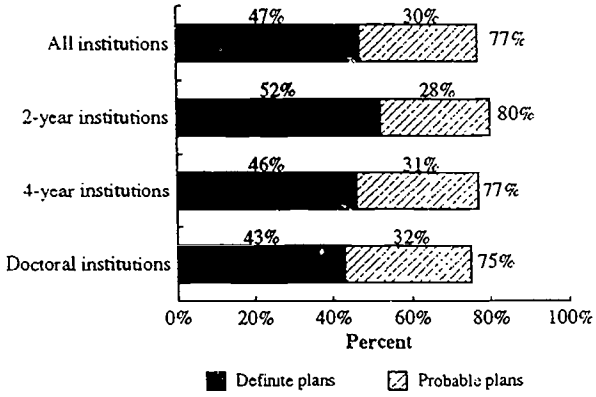
NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Career Expectations. Roughly half (47 percent) of SSS students said they had definite career plans for after college, while 30 percent had probable career plans (Figure 2-27). Students at 2-year colleges were more likely to have definite plans (52 percent) than those at 4-year colleges or doctoral institutions (43 percent to 46 percent).

The most common expectation for the next 5 to 10 years was that they would be doing professional or technical work (62 percent; Table 2-26). Other expectations were to be managers or proprietors (13 percent) and school teachers (12 percent). Students at 2-year colleges were generally similar to those at 4-year colleges, except that they were less likely to expect to be school teachers (8 percent versus 14 percent). Students at doctoral institutions were less likely to expect to be teachers (7 percent) than students at 4-year colleges (14 percent).

Figure 2-27. Percentage of Student Support Services (SSS) students with career plans: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Table 2-26. Type of work that Student Support Services (SSS) freshmen expect to do in next 5 to 10 years: 1991-92

Type of work	All institutions	2-year institutions	4-year institutions	Doctoral institutions
Clerical/sales . . .	5%	7%	4%	4%
Crafts/operators/ laborers	1	2	1	1
Service	8	11	7	9
Managers/ proprietors	13	12	12	16
Professional/ technical	62	60	62	63
Teachers	12	8	14	7

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92.*

Self-concept. In many ways, SSS students had a positive self-concept. A large majority (66 percent) considered themselves either above average or in the top 10 percent in their drive to achieve (Table 2-27). Other areas where at least a majority considered themselves above average or in the top

10 percent were in their emotional health (58 percent), physical health (57 percent), intellectual self-confidence (57 percent), social self-confidence (55 percent), and leadership ability (52 percent). To the extent that there were differences, students at 4-year colleges generally had more positive self-concepts than those at 2-year colleges. For example, they more often considered themselves above average or in the top 10 percent in leadership ability (52 percent versus 43 percent), academic ability (43 percent versus 36 percent), mathematical ability (32 percent versus 24 percent), and physical health (57 percent versus 50 percent). Similarly, SSS students at doctoral institutions generally had more positive self-concepts than those at 4-year colleges. Some of the greatest differences were in leadership ability (61 percent versus 52 percent), popularity (47 percent versus 40 percent), and academic ability (50 percent versus 43 percent).

Compared to all freshmen nationwide, SSS students were somewhat more likely to consider themselves above average or in the top 10 percent in terms of intellectual self-confidence (57 percent versus 51 percent) and social self-confidence (55 percent versus 46 percent), and less likely in academic ability (43 percent versus 52 percent) and mathematical ability (30 percent versus 36 percent). While SSS students at 2-year colleges generally had less positive self-concepts than SSS students at 4-year colleges, they often had more positive self-concepts than students at 2-year colleges overall. Thus, they more often ranked themselves above average or in the top 10 percent in intellectual self-confidence (54 percent versus 39 percent), social self-confidence (52 percent versus 40 percent), writing ability (39 percent versus 28 percent), and drive to achieve (62 percent versus 56 percent). By contrast, SSS students at 4-year colleges were more positive than all freshmen at 4-year colleges in social self-confidence (56 percent versus 48 percent), and were less positive in academic ability (43 percent versus 58 percent).

Another way of examining the self-concept of SSS students is to look at several of the noncognitive dimensions used by Tracey and Sedlacek (Table 2-28). The students generally agreed most strongly with items concerning realistic self-appraisal, relating to their response to rewards and other types of feedback. For example, they wanted a chance to prove themselves academically (91 percent), they act if they believe strongly in something (86 percent), they would make use of tutoring (76 percent), and they largely reject the concept that actions for other people will not be rewarded (12

Table 2-27. Percentage of Student Support Services (SSS) freshmen and all freshmen who rated themselves in the top 10 percent or above average on selected qualities: 1991-92

Quality	SSS freshmen				All freshmen (CIRP data)			
	All institutions	2-year institutions	4-year institutions	Doctoral institutions	All institutions	2-year institutions	4-year institutions	Doctoral institutions
Academic ability	43%	36%	43%	50%	52%	32%	58%	76%
Artistic ability	28	28	27	27	24	21	24	29
Drive to achieve	66	62	66	68	66	56	69	76
Emotional health	58	54	58	65	56	50	58	63
Leadership ability	52	43	52	61	50	41	53	59
Mathematical ability	30	24	32	30	36	25	38	53
Physical health	57	50	57	62	57	51	58	63
Popularity	40	35	40	47	41	35	42	48
Self-confidence (intellectual)	57	54	58	62	51	39	55	64
Self-confidence (social)	55	52	56	65	46	40	48	52
Writing ability	38	39	38	42	39	28	43	51

SOURCE: SSS participant data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*; All freshmen data: Cooperative Institutional Research Program, Higher Education Research Institute, University of California and American Council on Education, *The American Freshman: National Norms for Fall 1991*.

Table 2-28. Percentage of Student Support Services (SSS) freshmen who agreed or strongly agreed in various noncognitive dimensions: 1991-92

Dimensions*	All institutions	2-year institutions	4-year institutions	Doctoral institutions
Academic Positive Self-Concept (PSC)				
My high school grades don't really reflect what I can do	63%	69%	61%	62%
I expect to have a harder time than most students here	26	27	24	33
It should not be very hard to get a B average here	50	57	50	39
I am as skilled academically as the average applicant here	65	61	66	64
Realistic Self-Appraisal (RSA)				
I want a chance to prove myself academically	91	92	91	92
If tutoring is made available on campus at no cost, I would attend regularly	76	74	75	79
When I believe strongly in something I act on it	86	85	86	85
There is no use in doing things for people, you only get it in the neck in the long run	12	15	12	9
Support of Academic Plans (SUP)				
My friends and relatives don't feel I should go to college	5	8	4	3
My family has always wanted me to go to college	82	79	82	85
If I run into problems concerning school, I have someone who would listen to me and help me	82	80	82	82
Leadership (LEA)				
I am sometimes looked up to by others	61	58	61	65
In groups where I am comfortable, I am often looked to as a leader	43	36	44	51
People can pretty easily change me even though my mind was already made up on a subject	13	12	15	11
Long Range Goals (LRG)				
I easily get discouraged when I try to do something and it doesn't work	43	44	42	44
Once I start something, I finish it	72	72	73	71
Ability to Establish Community Ties (COM)				
The college should use its influence to improve social conditions in the state	59	59	60	60
Understanding of Racism (RAC)				
I expect I will encounter racism at this college	36	26	33	57
I usually feel comfortable on this campus	79	80	80	78
It should not be very hard to get a B average here	50	57	50	39

*See Tracey, T.J., and Sedlacek, W.E. (1989). "Factor Structure of the Non-Cognitive Questionnaire-Revised Across Samples of Black and White College Students." *Educational and Psychological Measurement*, 49, 637-48.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Baseline Survey, 1991-92*.

percent). The SSS students also often agreed with items relating to the support they feel for their academic plans. Few students agreed that their friends and relatives did not think they should go to college (5 percent), while most said that their family wanted them in college (82 percent), and that someone would listen to and help them (82 percent). Finally, the students often showed an academic positive self-concept, feeling that they were as skilled academically as the average applicant (65 percent), their high school grades did not reflect what they could do (63 percent), and that it would not be hard to get a "B" average (50 percent); they also typically rejected the idea that they would have a harder time than most students (26 percent agreeing with the statement).

For some items, there were substantial differences among the SSS students depending on what type of institution they attended. Compared with students at doctoral institutions, students at 2-year institutions were more likely to say it would not be hard to get a "B" average (57 percent versus 39 percent), and less likely to say they are often looked up to as a leader (36 percent versus 51 percent), they are looked up to by others (58 percent versus 65 percent), and expect to encounter racism (26 percent versus 57 percent).

3. A PROFILE OF SERVICES RECEIVED BY SSS STUDENTS

Introduction

This chapter presents summary information from detailed service records collected over the 1991-92 academic year. We address the question of the typical types and amount of service received by SSS students over the course of the year. In addition to the service record data, we include some summary information (also presented in the implementation study report) taken from the performance report file from which the sample of projects was drawn.

Purpose of the Service Record Collection. The service record collection had two major purposes: for the descriptive study, to give a more indepth profile of services offered to SSS students; and for the longitudinal study of project impact, to serve as a measure of service type and intensity. This chapter focuses on the first purpose and presents descriptive information on the level of services. A subsequent report will look at the relationship of service levels to student outcomes.

Service Record Methodology. The 30 SSS projects participating in the indepth study were asked to keep detailed student-based service records on students participating in the project. Those projects that anticipated serving fewer than 135 freshmen were asked to keep records on all freshmen, and those anticipating serving more freshman students were instructed to randomly select students based on Social Security numbers. Nonfreshmen were also sampled based on the last digit of their Social Security number, with those programs serving under 75 nonfreshmen taking all students. Most schools (21 of the 28) kept records on all freshman students and a sample of nonfreshmen served. Of the 30 schools in the study, 28 sent usable service records on a consistent basis throughout the year. In all, records were kept on a total of about 4,750 SSS students. Of this total, 2,632 were freshmen and 2,109 were nonfreshmen.

As students came into the SSS projects over the course of the year, lists of participants were forwarded to Westat. Projects were then assisted in sampling by the study office. Once students were in the sample, personalized service record forms were produced for the student every 2 months and projects were instructed to record all services. The forms were then returned to the study office on a flow basis throughout the year. A copy of this form is included as Exhibit 3-1 (exhibits are found at the end of this chapter). In order to be in the service record sample, a student had to have received at least one service.

Information Collected. Records were kept on any type of service offered by the project. This was usually in-person service, but a telephone counseling session, for example, would also be included. Projects were instructed to include all services, including short sessions. Time for sessions with multiple foci were prorated in this analysis. A copy of the service list is presented as Exhibit 3-2.

Services included the nine major types listed and numerous service subtypes:

- Instructional courses
- Professional tutoring
- Peer tutoring
- Professional counseling
- Peer counseling
- Labs
- Workshops
- Cultural events
- Special services to handicapped

The category services to the handicapped includes special services that are appropriate only for handicapped persons (see Exhibit 3-2). If a handicapped student received tutoring in a manner that was similar to other students, this service was coded as tutoring.

For each service contact the following information was collected:

- Type of service
- Date of service

- Duration in minutes
- Number of students in service (for example, a course may have 25 students, an individual tutoring session only 1 student, or a group tutoring session 4 students).

Categorizations. Data in this chapter are presented for totals and typically by freshmen and nonfreshmen and for projects in 2-year and 4-year schools. In addition some data are presented by public and private school status.

Limitations of the Service Record Collection. There were certain factors involved in service record data collection that must be considered in examining the results. Not only do the services offered vary from project to project, but the role occupied by SSS within the institution also varies, as does the mix of students and student needs among institutions. For example, some SSS projects are directly involved with instructional courses by paying a part of instructors' salaries and offering special SSS sections; other projects have no direct involvement with the instructional courses, but may provide tutoring for SSS students taking the course. In these latter cases, some of the SSS students may be taking the same type of courses without receiving any SSS services relating to that course. If the SSS project is not involved in any way with the course, it is usually not reported as a service. The records therefore do not tell us the total amount of supplemental or developmental services received by the student, but rather the amount received in some way under the SSS project.

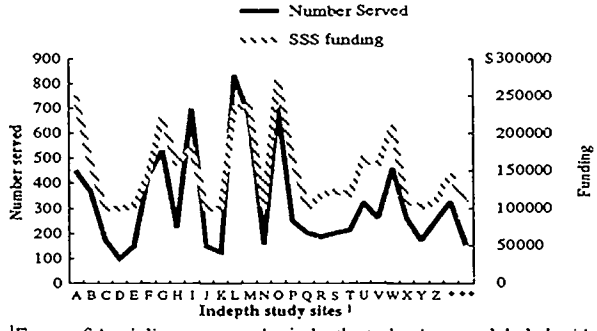
Background Information on Overall Service Levels and Cost of Service. The following is a brief summary of overall service information on SSS programs. More qualitative detail on this topic is presented in the implementation study report.

Considering all 700 SSS projects funded in 1992, the average cost per student for SSS projects was $768 and the average grant size was $163,700 (data from SSS project office). An average of 235 students was reported served per project. For our group of mature projects participating in the in-depth study (those funded in both 1987 and 1990) the average number served was higher at 290 per project, and the average grant size was $185,620. If institutional funding is included, the average grant size is increased to $207,276 at a cost of $708 per student served.

A question may be asked concerning the relationship between the grant size and the number of students reported served. Since we know that projects vary in the extent to which they have additional institutional support and, more importantly, in the types and intensity of services offered and staff utilized, we would not expect a direct correspondence between grant size and number served. Previous studies of SSS projects have not found this relationship, and the project grant office notes that, in addition to the items mentioned above, there are also regional and institutional differences in salary that contribute to the lack of correspondence between grant size and number served.

Figure 3-1 plots the number served and grant size for the 28 indepth study sites. As shown, although there is a level of correspondence between number served and funding level, this relationship is not true for all projects and varies in extent within projects.[1]

Figure 3-1. Number of Student Support Services (SSS) students served over the course of the year and SSS funding levels: indepth study sites, 1991-92



[1]For confidentiality reasons, the indepth study sites are labeled with the letters from A - Z and the symbols * and **.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Project Directors Survey, 1991-92.*

[1]Overall, using data from the national survey sample of 200 projects, there was a significant relationship between number served and funding, with an r-square of .29, indicating that just under one-third of the variation could be explained by this relationship.

Summary of Results from Service Records

Percentage of Students Receiving Services. Table 3-1 and Figure 3-2 give information on the percentage of students receiving selected services. Overall the figures for those receiving services ranged from 78 percent for professional counseling to 2.3 percent for specific services to the handicapped.[2] Other figures for services received included 47 percent, peer tutoring; 22 percent, workshops; 15 percent, professional tutoring; 13 percent, labs; 12 percent, peer counseling; and 7 percent, cultural events.

Table 3-1. Percentage of Student Support Services (SSS) students receiving each type of service: indepth study sites, 1991-92

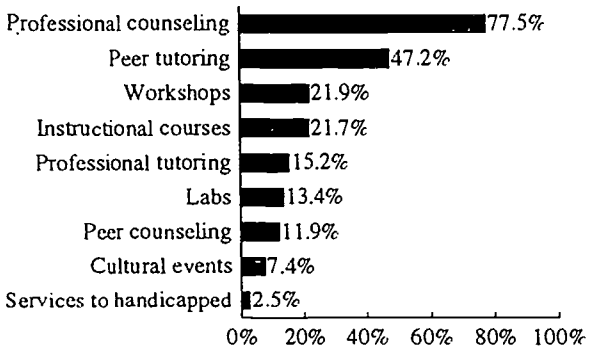
Type of service[1]	SSS participants		
	Total	Freshmen	Non-freshmen
Instructional courses	21.7%	29.7%	11.8%
Tutoring (professional)	15.2	15.2	15.1
Tutoring (peer)	47.2	46.0	48.9
Counseling (professional)	77.5	78.8	76.0
Counseling (peer)	11.9	13.0	10.5
Labs	13.4	16.0	10.1
Workshops	21.9	29.5	12.4
Cultural events	7.4	8.9	5.5
Services to handicapped[2]	2.5	2.6	2.5
Number	(4,746)	(2,632)	(2,109)

[1]Each student may receive more than one type of service.

[2]Only services specifically designed for handicapped students were included in this category. Other services received by handicapped students were classified under the applicable type of service.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

Figure 3-2. Percentage of Student Support Services (SSS) participants receiving service: indepth study sites, 1991-92



SOURCE: U.S. Department of Education, Office of Planning and Evaluation Service, National Study of Student Support Services, *1991-92 Service Record Analysis.*

Comparison with Performance Reports. Table 3-2 presents performance report data for 1988 on the percentage of students receiving each service for the total population of projects funded in both 1987 and 1990. Comparison with the service record data from our study indicates a consistency between the two reporting sources for those services that are classified in a similar manner. For example, the performance report data indicate that about 63 percent had tutoring, and the service records for the 28 schools in our sample indicate that 57 percent had some form of tutoring (Figure 3-3). The performance report data indicate that 76 percent had academic counseling, and the service records that 78 percent had professional counseling (Table 3-1).

Dominance of Counseling. As seen in Table 3-1, the most prevalent service of Student Support Services projects was professional counseling. A look at the data concerning SSS participants receiving either professional or peer counseling reveals that 81 percent received one of these forms of counseling (Figure 3-3).

[2]The percentage of students receiving specific services to handicapped (2.5%) should not be confused with the percentage of SSS students who are physically disabled (about 12 percent of the total).

Table 3-2. Number and percentage of participants receiving service: Performance Reports, 1988

Service	For institutional credit		For academic support	
	Number[1]	Percentage of total SSS participants	Number[1]	Percentage of total SSS participants
Instructional services				
Reading	16,400	11%	22,300	15%
Writing	14,900	10	25,300	17
Study skills	13,400	9	34,200	23
Mathematics	22,300	15	32,700	22
English	14,900	10	19,300	13
English proficiency	8,900	6	14,900	10
Other	8,900	6	14,900	10

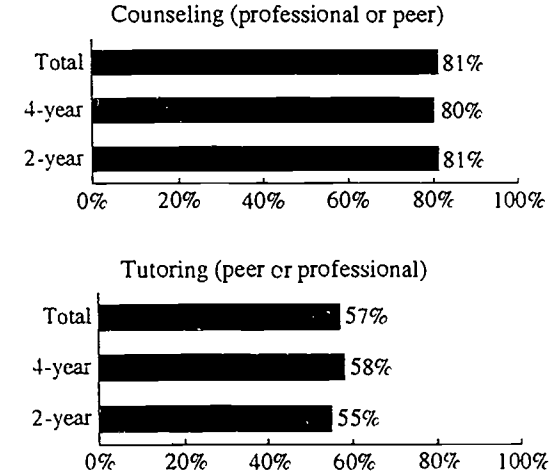
	Number[1]	Percentage of total SSS participants
Tutoring	93,700	63%
Academic counseling	113,000	76
Financial aid counseling	75,800	51
Personal counseling	72,800	49
Career counseling	56,500	38
Peer counseling	23,800	16
Graduate counseling	10,400	7
Cultural/academic enrichment activity	50,500	34

[1]Rounded to nearest 100.

NOTE: Based on a 1988 performance report data for 600 SSS projects funded in both 1987 and 1990. Percent indicates percentage of 148,666 students served by included projects.

SOURCE: U.S. Department of Education, Office of Planning and Evaluation Service, National Study of Student Support Services, *Performance Reports, 1987-88.*

Figure 3-3. Percentage of Student Support Services (SSS) participants receiving any type of counseling and tutoring: indepth study sites, 1991-92



SOURCE: U.S. Department of Education, Office of Planning and Evaluation Service, National Study of Student Support Services, *1991-92 Service Record Analysis.*

Table 3-3 breaks down the services by detailed type. The most frequent type of professional counseling was academic, with 69 percent of students receiving this service. Financial aid counseling was given to 23 percent of the students. Career and graduate school counseling was provided to a smaller number of students -- 9 percent and 4 percent, respectively.

Frequency of Tutoring. The second most frequent service overall was tutoring, with 47 percent of participants receiving peer tutoring and 15 percent receiving professional tutoring. The proportion receiving either peer or professional tutoring was 57 percent (Figure 3-3). Among peer tutoring the most frequent subject was math, with 24 percent of SSS students receiving this service. English was next at 15 percent, followed by science at 11 percent (Table 3-3).

Table 3-3. Percentage of Student Support Services (SSS) participants receiving each type of service, detailed list: indepth study sites, 1991-92

Type of service	Percentage receiving service	Type of service	Percentage receiving service
Any instructional course	**21.7%**	**Any labs**	**13.4%**
Reading	5.0	English	1.6
Writing	8.6	Writing	3.1
Study skills	11.5	Reading	2.3
Developmental mathematics	8.5	Math	5.8
Developmental English	3.2	Science	.1
English proficiency	.3	Test taking	.3
Other (including summer program)	6.5	Other	5.0
Any professional tutoring	**15.2**	**Any workshops**	**21.9**
General	4.0	Orientation	14.5
English	6.7	Study skills	6.4
Math	4.6	Test taking	.7
Science	1.2	Career	2.8
Social studies	.5	Other	5.0
Other	2.7	**Any cultural events**	**7.4**
Any peer tutoring	**47.2**	Museums	.9
General	5.0	Concerts	2.0
English	14.6	Lectures	.7
Math	23.5	Other	4.2
Science	11.0	**Any special services for handicapped**[1]	**2.5**
Social studies	4.6	Reader	.3
Other	9.8	Note taker	.6
Any professional counseling	**77.5**	Oral testing	.3
Academic/advising	68.6	Taped texts	.3
Personal	26.6	Dictated exams	*
Financial aid	22.6	Proctored exams	.4
Career	9.1	Counseling (other than above)	1.5
Graduate school	4.2	Special schedule	.2
Other	13.8	Lab assistance	.1
Any peer counseling	**11.9**	Taped lectures	*
Academic/advising	9.9	Computerized instructions	*
Personal	3.8	Extended time testing	.2
Financial aid	.9	Other	.9
Career	.6		
Graduate school	.7		
Other	2.7		

*Less than .1 percent.

[1]Services were only placed in the handicapped service category if they were specifically designed for handicapped students. Other services received by handicapped students were classified under the applicable type of service. Projects serving only handicapped students were excluded from the indepth study and are not reflected in these numbers.

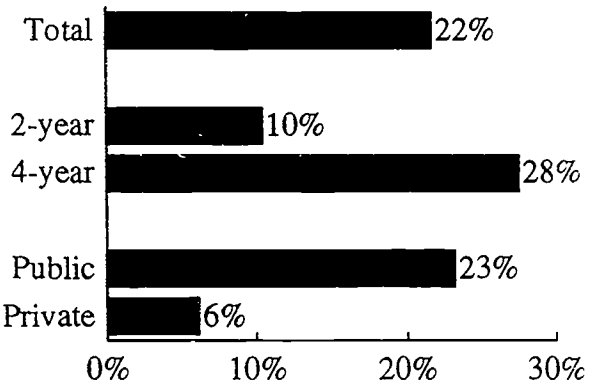
NOTE: A student may receive more than one type of service. Percentages are of total SSS participants.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

Instructional Courses. Almost one-fourth (22 percent) of the students in our study received instructional courses that were part of the SSS program (Table 3-1 and Figure 3-4). Usually this was a special section of a developmental or introductory course that was taught by an instructor funded by SSS. Often these courses had special labs or other unique features such as supplemental instructing (SI) sessions. For 3 percent of the sample the instructional course was the only SSS service recorded. Courses were most frequently taken in study skills, math, and writing (Table 3-3). Freshman SSS students were more likely to be involved in SSS-related instructional courses than were nonfreshman SSS students (Table 3-1).

SSS involvement in instructional courses took place more frequently at 4-year than at 2-year institutions (28 percent of SSS students at 4-year schools received courses as an SSS service compared with 10 percent at 2-year schools), and at public institutions than at private ones (23 percent at public schools compared with 6 percent at private received instructional courses; Table 3-4 and Figure 3-4). At 2-year schools, these types of courses were almost always available at the institution, but SSS programs were less frequently involved in providing this service.

Figure 3-4. Percentage of Student Support Services (SSS) participants receiving instructional courses associated with the SSS program: indepth study sites, 1992



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

Table 3-4. Percentage of Student Support Services (SSS) participants receiving service, by institution level and control: indepth study sites, 1991-92

Type of service	Total	Level		Control	
		2-year	4-year	Public	Private
Instructional courses	21.7%	10.4%	27.5%	23.2%	6.1%
Tutoring (professional)	15.2	13.1	16.2	15.4	12.4
Tutoring (peer)	47.2	48.3	46.7	48.4	35.1
Counseling (professional)	77.5	80.1	76.0	77.3	80.4
Counseling (peer)	11.9	14.7	6.4	13.0	.5
Labs	13.4	17.9	11.1	14.5	1.7
Workshops	21.9	2.6	25.4	4.8	32.2
Cultural events	7.4	2.6	9.8	[illegible].8	35.1
Services to handicapped	2.5	2.2	2.7	2.7	1.0

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

Multiple Types of Services. Students may come to SSS projects for only one service or for a variety of services. We know from the project survey and our service records that almost no projects offer only one type of service. Among the projects in our study, all provided professional counseling and only one did not provide peer tutoring (Table 3-5). Some 61 percent had at least some students participating in instructional courses, and 75 percent had workshops. About 50 percent provided at least one special service to the handicapped. As seen in the case studies, however, projects differ in emphasis and in the extent to which students participate in multiple services.

Table 3-5. Percentage of schools providing each type of service: indepth study sites, 1991-92

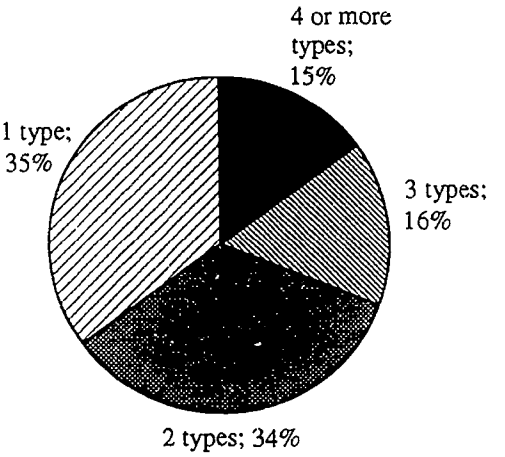
Type of service	Total	
	Number	Percent
Instructional courses	17	61%
Tutoring (professional)	18	64
Tutoring (peer)	27	96
Counseling (professional) . .	28	100
Counseling (peer)	17	61
Labs	13	46
Workshops	21	75
Cultural events	12	43
Services to handicapped . . .	14	50

NOTE: Indicates percentage having at least one student receiving service during the data collection period of August 1991 to June 1992.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

Percentage Distribution of Number of Different Services. Overall, just over one-third (35 percent) of SSS students participated in only one type of service. Another 34 percent had two types of services, 16 percent three types, and another 15 percent had four or more types (Figure 3-5). Nonfreshman SSS students were more likely to have only one type of service, with 41 percent in this category compared with 29 percent for freshman participants (Table 3-6).

Figure 3-5. Percentage distribution of the number of different types of services received by Student Support Services students: indepth study sites, 1991-92



SOURCE: U.S. Department of Education Office of Planning and Evaluation Service, National Study of Student Support Services, *1991-92 Service Record Analysis.*

Table 3-6. Percentage distribution of number of different types of services per student: indepth study sites, 1991-92

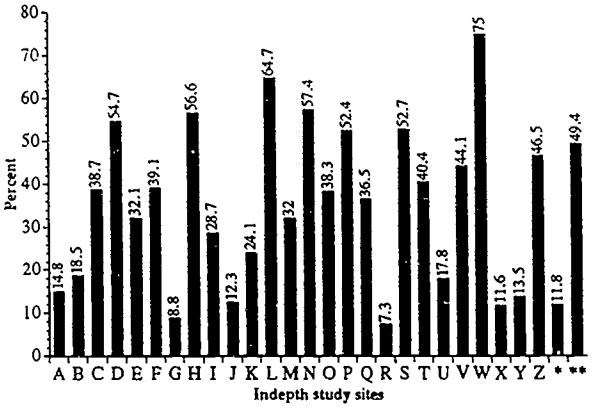
Number of types of services	Total	Freshmen	Non-freshmen
1	34.7%	29.4%	41.4%
2	34.6	32.1	37.7
3	15.8	18.0	13.0
4	9.3	13.0	4.7
5	3.9	5.4	2.0
More than 5 . . .	1.7	2.1	1.3
Total	100.0	100.0	100.0
Number	(4,746)	(2,632)	(2,109)

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

The service mix among projects varies considerably by school. Figure 3-6 graphically displays the 28 indepth study sites by the percentage of students receiving only one type of service. We can see that the number varies from about 7 percent to about 75 percent. The projects with the large percentages tend to be those in which the focus is on one dominant service, identified in the implementation study report as "dominant service" projects.

Figure 3-6. Percentage of Student Support Services (SSS) students receiving only one type of service, by projects: indepth study sites, 1991-92

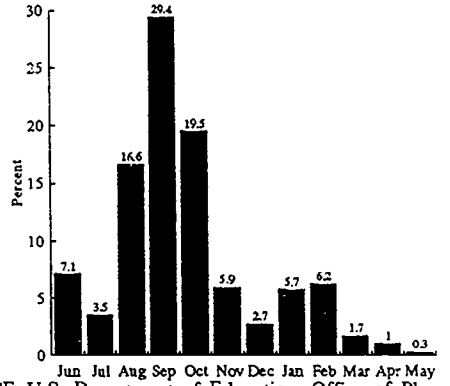


[1]For confidentiality reasons, the indepth study sites are labeled with letters A - Z and the symbols * and **.

SOURCE: U.S. Department of Education, Office of Planning and Evaluation Service, National Study of Student Support Services, *1991-92 Service Record Analysis.*

Month of Initiation of Service. The months in which the service began for most students were August, September, or October. Consistent with project regulations that encourage projects to identify participants in the fall, only a small percentage began in January or February (Figure 3-7). Eleven percent of participants began service during June and July, often as part of an early orientation program.

Figure 3-7. Percentage distribution of month in which Student Support Services (SSS) students received first SSS service: indepth study sites, 1991-92



SOURCE: U.S. Department of Education, Office of Planning and Evaluation Service, National Study of Student Support Services, *1991-92 Service Record Analysis.*

Duration in Months from the First Recorded Service. The average duration of participation in a service for those receiving the service ranged from 4.8 months for professional counseling to 2.3 months for cultural events (Figure 3-8). Peer tutoring on average took place over a 3.6 month period, or about one semester. It should be kept in mind that this number is an average, with some students being in longer periods and some, much shorter periods. Some students participated for the entire year, some for a semester, and some for less than a month. Course participation averaged about 4.7 months.

Contacts per Student by Service. Tables 3-7 and 3-8 and Figure 3-9 give the mean number of contacts per type of service for students in SSS programs that provide the service. These numbers should be used in combination with the percentage getting the service. For example, services to the handicapped had a mean of 25 contacts per student but was received by only 3 percent of the participants. Peer tutoring, received by 47 percent of participants, had a mean number of contacts of 12. Professional counseling, received by 78 percent of participants, had a mean of 7 contacts. Instructional courses were received by 22 percent of the total and averaged 53 contacts for the students having this service.

Table 3-7. Mean and median number of contacts per type of service for freshman and nonfreshman Student Support Services (SSS) participants: 1991-92

Type of service	Contacts per student having service[1]					
	Total		Freshmen		Nonfreshmen	
	Mean	Median	Mean	Median	Mean	Median
Instructional courses	52.9	38	56.3	39	44.2	36
Tutoring (professional)	5.3	3	4.2	2	6.7	3
Tutoring (peer)	11.5	7	12.3	8	10.7	6
Counseling (professional)	7.2	4	8.0	4	6.3	4
Counseling (peer)	4.2	2	5.0	3	3.0	2
Labs	9.3	6	9.1	6	10.0	6
Workshops	5.2	2	6.4	2	1.8	1
Cultural events	1.7	1	1.7	1	1.8	1
Services to handicapped	25.2	5	29.5	7	19.7	3
Total contacts	11.9	4	13.6	5	9.4	4

[1]These numbers should be considered in relationship to the percentage of recipients receiving the service. See table 3-1 for this information.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

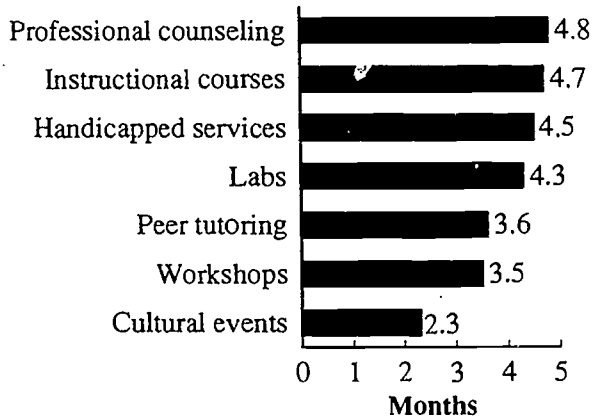
Table 3-8. Mean and median number of contacts per type of service by institution level and control: 1991-92

Type of service	Contacts per student having service[1]			
	2-year schools		4-year schools	
	Mean	Median	Mean	Median
Instructional courses	32.4	25	57.9	42
Tutoring (professional)	7.0	4	4.5	3
Tutoring (peer)	9.7	6	12.5	8
Counseling (professional)	6.6	4	7.6	4
Counseling (peer)	2.1	1	4.7	3
Labs	12.7	9	6.6	3
Workshops	1.7	1	6.3	2
Cultural events	1.7	1	1.7	1
Services to handicapped	53.8	3	13.3	6
Total contacts	9.3	5	13.1	4

[1]These numbers should be considered in relationship to the percentage of recipients receiving the service. See table 3-1 for this information.

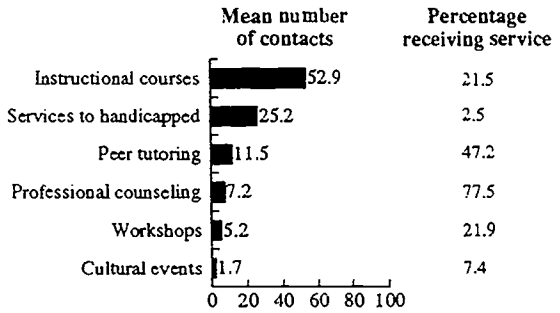
SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

Figure 3-8. Mean months from first to last recorded service for Student Support Services (SSS) students receiving service: indepth study sites, 1991-92



SOURCE: U.S. Department of Education, Office of Planning and Evaluation Service, National Study of Student Support Services, *1991-92 Service Record Analysis.*

Figure 3-9. Mean number of service contacts for those having service: 1991-92



SOURCE: U.S. Department of Education, Office of Planning and Evaluation Service, National Study of Student Support Services, *1991-92 Service Record Analysis*.

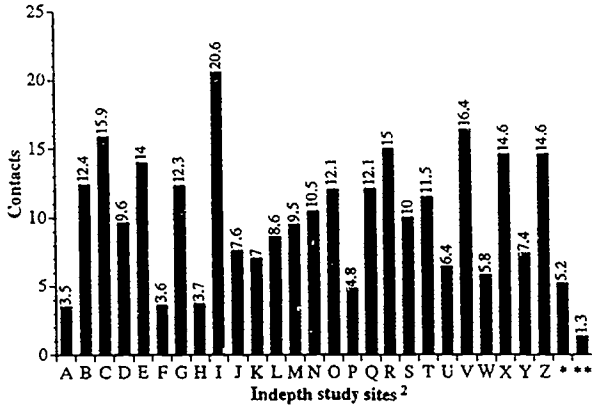
The number of contacts per student receiving the service ranged from 53 for the 22 percent receiving instructional courses to 5 for the 22 percent participating in workshops.

Figures 3-10 and 3-11 provide a school-by-school graph of the mean number of professional counseling and peer tutoring contacts per student receiving the service. There is considerable variation by project. The range for peer tutoring goes from 1 to 21, with the median being 7. For counseling, the range goes from about 1 to about 23, with the median being 4.

Overall Number of Contacts per Student. Overall the SSS students in our sample averaged 11.9 total service contacts per student, including instructional courses. Students in 4-year schools averaged a higher number of contacts (13.1) than those in 2-year schools (9.3; Table 3-8 and Figure 3-12). Freshman SSS students had a mean of 13.6 contacts and nonfreshmen a mean of 9.4 contacts. In the 1979-80 study the mean number of total contacts per student was 14.

Distribution of Level of Contact. Overall about 9 percent of SSS students had only one service contact reported, 20 percent had 2 to 5 contacts, 17 percent 6 to 10 contacts, 25 percent 11-25 contacts, and 30 percent more than 25 contacts (Figure 3-13a).

Figure 3-10. Mean number of tutoring[1] contacts of Student Support Services (SSS) students by school: indepth study sites, 1991-92

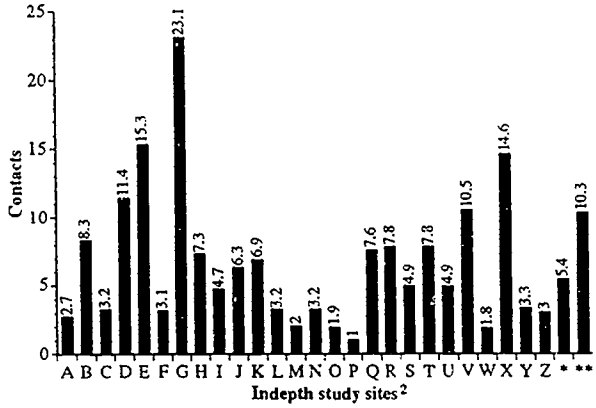


[1]Tutoring is peer tutoring unless only professional tutoring is offered.

[2]For confidentiality reasons, the indepth study sites are labeled with letters A - Z and the symbols * and **.

SOURCE: U.S. Department of Education, Office of Planning and Evaluation Service, National Study of Student Support Services, *1991-92 Service Record Analysis*.

Figure 3-11. Mean number of counseling[1] contacts of Student Support Services (SSS) students by school: indepth study sites, 1991-92

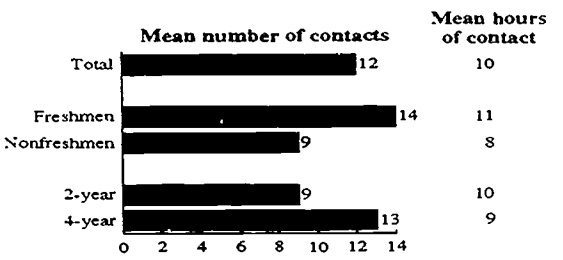


[1]Counseling is professional counseling.

[2]For confidentiality reasons, the indepth study sites are labeled with letters A - Z and the symbols * and **.

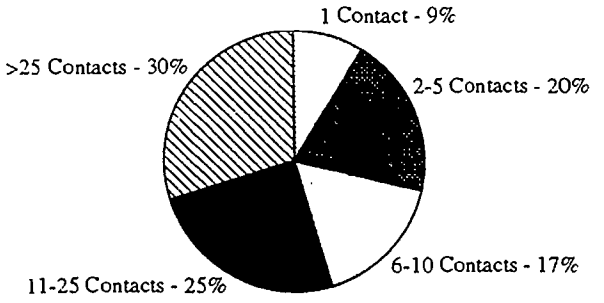
SOURCE: U.S. Department of Education, Office of Planning and Evaluation Service, National Study of Student Support Services, *1991-92 Service Record Analysis*.

Figure 3-12. Mean number of overall service contacts and hours of contact for Student Support Services (SSS) participants: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

Figure 3-13a. Percentage distribution of the number of service contacts of Student Support Services (SSS) students, including instructional courses: indepth study sites, 1991-92



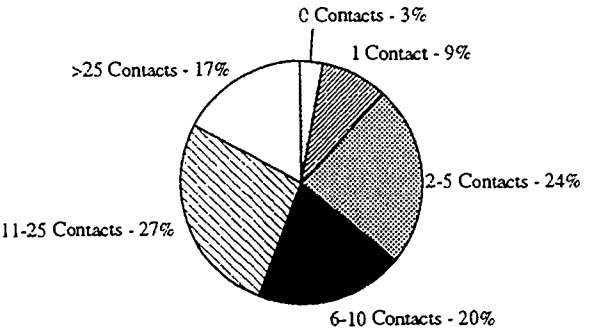
NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

Some of the 9 percent of students having only one contact were students who dropped out of school very soon after enrolling; others were students who may have come in only once for an academic advising or tutoring session.

If instructional courses are excluded, 3 percent of students had 0 contacts other than the courses, and 17 percent had more than 25 contacts (compared with 30 percent of students when instructional courses are not excluded; Figure 3-13b).

Figure 3-13b. Percentage distribution of the number of service contacts of Student Support Services (SSS) students, excluding instructional courses: indepth study sites, 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

Total Contact Hours. The average SSS student received 10 hours of service from the SSS project over the period of our data collection (August to June). Freshmen averaged 11 hours and nonfreshmen, 8 hours. Two-year and 4-year schools did not differ in average hours of contact (Table 3-9 and Figure 3-12). The average hours of contact ranged from 45 hours for the 22 percent receiving instructional courses to 2 hours for the 78 percent receiving professional counseling. Peer tutoring, received by 47 percent of the students, averaged 13 hours, and labs, received by 13 percent, averaged 12 hours.

Comparison with 1979-80 Study Data. Table 3-10 compares results from the 1979-80 study with those from the 1991-92 study. While some caution must be taken in comparing studies with different methodologies, the data indicate some reduction in the per participant mean hours of service. In 1991-92, the average SSS participant had 12 contacts with the project and received 10 hours of service over the course of the academic year (most often counseling or tutoring). A 1979 evaluation found that the average participant had 14 contacts and received 14 hours of service. Similarly, per-participant SSS expenditures (adjusted for inflation) have declined nearly 30 percent since 1970. Most of the reduction in service can be

Table 3-9. Mean and median hours of contact per service type, indepth study sites, 1991-92

Type of service	Hours of contact for students having service[1]					
	Total		Freshmen		Nonfreshmen	
	Mean	Median	Mean	Median	Mean	Median
Instructional courses	44.5	30.0	46.7	27.5	38.7	32.9
Tutoring (professional)	3.9	1.0	2.7	9.2	5.5	1.5
Tutoring (peer)	13.3	8.0	14.1	9.0	12.3	7.1
Counseling (professional)	2.4	1.3	2.6	1.4	2.2	1.3
Counseling (peer)	1.7	0.6	2.0	0.9	1.2	0.5
Labs	11.7	6.1	12.1	6.5	11.0	5.7
Workshops	4.3	2.5	4.9	3.0	2.6	2.0
Cultural events	5.4	2.0	5.6	2.3	5.0	2.0
Services to handicapped	35.6	2.5	42.0	3.6	26.3	1.0
Total contacts	9.7	2.5	10.9	3.0	7.9	2.1

[1]These numbers should be considered in relationship to the percentage of students receiving the service. See table 3-1 for this information.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

Table 3-10. Comparison of 1979-80 and 1991-92 results for tutoring and counseling

Service received	SSS projects offering service	SSS students receiving service	Amount of service received by those having service	
	Percent	Percent	Contacts	Hours
1991-92[1]				
All	100	100	11.9	9.7
Tutoring	96	57	11.5	13.3
Counseling	100	81	7.2	2.4
1979-80				
All	100	100	14.0	14.0
Tutoring	96	51	NA	9.1
Counseling	100	67	NA	2.6

[1]In 1991-92 data, the mean number of counseling contacts is for professional counseling and the mean number of tutoring contacts is for peer tutoring.

SOURCE: 1979-80 data: Coulson, John, Bradford, Clarence, and Kaye, Judith, Evaluation of the Special Services for Disadvantaged Students (SSS) Program, 1979-80 Academic Year, Systems Development Corporation, Santa Monica, California, August 1981. 1991-92 data: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

attributed to a decline in the percentage of participants receiving instructional courses through SSS (from 31 percent in 1979 to 22 percent in 1991) and an increase in the percentage receiving counseling, which involves fewer average hours of service (from 67 percent to 81 percent). This change is consistent with the increase in the number of 2-year schools receiving SSS grants. These 2-year institutions are less likely than 4-year colleges to use SSS resources to support instructional courses. There has been no reduction in average hours per participant for the two main SSS services--tutoring and counseling (see Table 3-10). The mean hours of counseling for those receiving the service were about the same for the two studies (2.6 in 1979-80 and 2.4 in 1991-92). For tutoring, the mean hours of service received by students having the service were actually higher in 1991-92 than in 1979-80 (9.1 in 1979-80, and 13.3 in 1991-92).

Mean Use per Month. The mean use per month by service was calculated by first obtaining the duration of the service in months from the start and end date for the service for a given student. Then the total number of services was divided by the

duration in months to obtain a use per month. Peer tutoring had an average mean use per month of just under 4 times per month and counseling was used about 1.6 times per month (data not shown in table).

Number of Students per Contact. The service records included a measure of the number of other students involved in the service contact. For example, a class may have 25 other students in addition to the student for whom the record was being kept, or a group tutoring session may have 2 or 3 other students. Table 3-11 gives the percentage distribution of the total number of students in each contact. Almost two-thirds of the contacts involved only 1 student, that is, they were one-on-one service contacts. About 9 percent involved 2-5 students; 4 percent, 6 to 10 students; 9 percent, 11-25 students; and 16 percent, more than 25 students.

Table 3-11. Percentage distribution of the number of students per contact: indepth study sites, 1991-92

Number of students	Total	Freshmen	Non-freshmen
1	63%	56%	73%
2-5	9	8	10
6-10	4	4	3
11-25	9	12	5
More than 25	16	20	9

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

Table 3-12 presents the distribution of number of students per contact by type of service. Among the instructional courses almost 50 percent of the contacts involved 25 or more students. About 71 percent of the peer tutoring was one on one and 23 percent involved 2 to 5 students. A similar percentage of lab contacts (72 percent) were one on one, but almost 25 percent (23.6 percent) of lab contacts were in groups of 11-25 students.

Professional counseling was administered in a one-on-one setting in about 82 percent of the contacts. Almost two-thirds of workshop contacts took place

Table 3-12. Percentage distribution of number of students per contact by type of service: indepth study sites, 1991-92

Type of service	Number of students per session				
	1	2-5	6-10	11-25	>25
Instructional courses	2.0	1.1	4.3	45.0	47.6
Tutoring (professional)	88.6	8.3	1.5	1.3	0.3
Tutoring (peer)	71.4	22.9	3.1	2.5	0.0
Counseling (professional)	81.5	5.7	3.5	2.8	6.6
Counseling (peer)	92.7	5.0	2.0	0.4	0.0
Labs	72.1	3.0	0.9	23.6	0.3
Workshops	9.9	4.3	9.3	15.3	61.2
Cultural events	8.8	4.8	4.3	10.5	71.5
Services to handicapped	95.0	2.5	0.0	0.8	1.7

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Service Record Analysis, 1991-92.*

in groups that had 25 or more participants and 72 percent of the cultural event contacts had 25 or more participants. Almost all, 95 percent, of the handicapped services were in a one-on-one setting.

Link with the Implementation Study Results

In the implementation study report we identified three ways in which SSS programs may be functioning on the campuses. The first and the smallest group are those projects in which SSS is basically the only or primary service provider on campus. This can happen at very small schools or at larger schools where the SSS project is the organizational medium or umbrella under which several services are organized. We found only three schools like this in our sample.

The second type of program was identified as a "home base on campus." This type of program targets a set of students and tries to serve the participating student with a range of services, attempting to provide a way of integrating the student to the campus and of giving or seeing that any needed supplemental services are provided for the student. Often the SSS counselor is the official academic advisor for the student, and sometimes there are special sections of a developmental course

for SSS students. There are usually labs or workshops that may or may not be required. Often some attempt is made to have group activities such as cultural events or, in some cases, service projects. The largest number of SSS projects we studied fell into this group.

The third type is called "dominant service projects." These SSS projects concentrate on delivery of one type of service, such as running a tutoring or learning assistance center or providing counseling. Other supplemental services may be received through other campus offices. Dominant service projects may also be ones in which the majority receive only one type of service, for example, counseling, and a few receive tutoring in addition to counseling.

Another dimension to classifying the programs is according to the extent to which the SSS project is blended with other services on campus. Given federal requirements for nonsupplanting and nonduplication operating up to 1992, almost all the sites had ways of maintaining their unique service and population served, but some did this in coordination with other service providers and some by having a more separate service delivery model. An example of a coordinated or integrated project might be a learning assistance center in which the SSS project director also served as the project director for the center, which included additional funding and served a wider population with a variety of services. These projects were called blended.

Of the 28 projects sending service records, 3 were characterized as all service, 14 home based, and 11 dominant service, and these were divided among those that are blended or separate (Table 3-13). For the most part the projects placed in the dominant service group also had a high percentage of students receiving only one service.

Table 3-13. Categorization of indepth study sites by program organization: 1991-92

Program organization	Blended	Separate
All service	1	2
Home base	3	11
Dominant service	4	7

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services, *Implementation Study Report.*

The Role of SSS within the Institution. The case studies made us aware that in most schools SSS is one of several providers of services to disadvantaged students, and at many these services are in the process of becoming institutionalized. There are, however, certain unique roles that SSS often has played and may be important to develop for the future.

One of these is that of innovator. In several schools the SSS project was viewed as a place to try out innovative service strategies. The federal requirement to maintain a unique SSS service, although causing problems in many ways, served to foster this role. A second role was that of service integrator, both for students and for the providers. The projects with goals and emphasis on serving the whole student provided this integration.

A third role is in the area of accountability for retaining students. In many schools the performance reporting and the emphasis on evaluation of results are done to a much larger extent in SSS programs than elsewhere on campus. A fourth role is the link to the national efforts. This link lends legitimacy to policies designed to retain disadvantaged student.

Exhibit 3-1. Service Record Form

National Study of Student Support Services
Student Participation Record Form

for August-September, 1991

Student Name: _____ Student Study ID:

Social Security Number: _____ Check here if no service during month |___|

Enter Type of Service (Code from list)	Enter Date of Service Month / Day	Enter Duration of Service in Minutes	Enter Initials of Service Provider(s)	Enter Number of Students in Session (Enter 1 if student is only one)
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Exhibit 3-2. Service list coding guide

1. Instructional Courses

a. Reading
b. Writing
c. Study Skills
d. Developmental Mathematics
e. Developmental English
f. English Proficiency
g. Other (SPECIFY)

_____

_____

h. Other (SPECIFY)

_____

_____

2. Tutoring (Professional)

a. General

Specific Course

b. _____

c. _____

d. _____

e. _____

f. _____

g. _____

h. _____

i. _____

3. Tutoring (Peer)

a. General

Specific Courses

b. _____

c. _____

d. _____

e. _____

f. _____

g. _____

h. _____

i. _____

4. Counseling (Professional)

a. Academic Counseling/Advising
b. Personal Counseling
c. Financial Aid Counseling
d. Career Counseling
e. Graduate School Counseling
f. Other (SPECIFY)

_____

_____

g. Other (SPECIFY)

_____

_____

5. Counseling (Peer)

a. Academic Counseling/Advising
b. Personal Counseling
c. Financial Aid Counseling
d. Career Counseling
e. Graduate School Counseling
f. Other (SPECIFY)

_____

_____

g. Other (SPECIFY)

_____

_____

6. Labs

a. English
b. Writing
c. Reading
d. Math
e. Science
f. Test Taking
g. Other (SPECIFY)

_____

_____

h. Other (SPECIFY)

_____

_____

7. Workshops

a. Orientation to College
b. Study Skills
c. Test Taking
d. Career Guidance
e. Other (SPECIFY)

_____

_____

f. Other (SPECIFY)

_____

_____

8. Cultural Events

a. Museums
b. Concerts
c. Lectures
d. Other (SPECIFY)

_____

_____

e. Other (SPECIFY)

_____

_____

9. Services to Handicapped

a. Reader
b. Note Taker
c. Oral Testing
d. Taped Texts
e. Dicated Exams
f. Proctored Exams
g. Counseling (other than above)
h. Special Schedule
i. Lab Assistance
j. Taped Lectures
k. Computerized Instructions
l. Extended Time Testing
m. Other (SPECIFY)

_____

_____

n. Other (SPECIFY)

_____

_____

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4. PRELIMINARY INFORMATION ON COURSE-TAKING PATTERNS OF SSS FRESHMAN STUDENTS

Introduction

This chapter will summarize the general course-taking patterns of the SSS students, as indicated on the first year transcripts. In order to make the data more comparable across students, this section will focus only on courses taken at the participating institution, and will not include transfer courses from other institutions.

Number of Courses Taken

On average, SSS students took 9.1 courses for regular credit, 0.4 courses for institutional credit, and 0.8 courses for no credit (Table 4-1).[3] In general, students that were enrolled at doctoral institutions took the greatest number of courses for regular credit (a mean of 10.9 courses versus 9.3 for those at 4-year institutions), and students at 2-year institutions took the fewest courses (a mean of 7.3). There was less variation in courses taken for institutional credit, but students averaged almost one such course per student (0.8) at 2-year institutions, versus 0.4 courses at 4-year institutions, and 0.0 courses at doctoral institutions. No consistent pattern appeared in taking courses for no credit, with students at both 2-year and doctoral institutions taking a greater number of courses (1.3) than those at 4-year institutions (0.5).

Table 4-1. Mean number of courses taken by Student Support Services (SSS) freshmen, by type of credit earned: 1991-92

Institutional characteristic	Regular credit	Institutional credit	No credit
Total	9.1	0.4	0.8
Type of institution			
2-year	7.3	0.8	1.3
4-year	9.3	0.4	0.5
Doctoral	10.9	0.0	1.3

SOURCE: U.S. Department of Education, Policy and Evaluation Service. National Study of Student Support Services (SSS), *Transcript Study*, 1991-92.

[3]Institutions vary in how courses are classified, and in what courses are listed on a college transcript. Thus, depending on the institution involved, students may have taken additional courses for institutional credit or for no credit besides those that are reflected here. Also, the number of courses varied among institutions depending on whether the institutions used a semester system or a quarter system. Typically, students take the same number of courses per term within the quarter system as students in the semester system, so that with three quarters per year, they take 50 percent more courses. Later sections in this chapter on the number of credits and the GPA earned will include a statistical correction to standardize these measures; this is less appropriate for measuring the number of courses taken, because each course may have been on a unique topic, even if each course was for fewer (standardized) credits.

Most of students' enrollment was in lower level classes (a mean of 8.5 courses), while they often also took remedial/developmental courses (1.4; Table 4-2). Introductory courses were relatively rare (0.2); however, courses that were classified as introductory at one institution might be classified as lower level courses at another. The number of courses taken at the upper level was also low (0.2), which is consistent with the students' status as freshmen at their institutions.

Table 4-2. Mean number of courses taken by Student Support Services (SSS) freshmen, by course level: 1991-92

Institutional characteristic	Remedial/ developmental	Introductory	Lower level	Upper level
Total	1.4	0.2	8.5	0.2
Type of institution				
2-year	3.1	0.0	6.3	0.0
4-year	0.9	0.2	8.9	0.3
Doctoral	0.7	0.0	10.6	0.4

SOURCE: U.S. Department of Education, Policy and Evaluation Service. National Study of Student Support Services (SSS), *Transcript Study*, 1991-92.

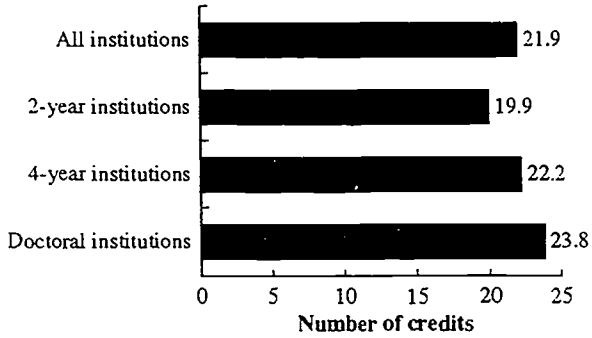
The course-taking pattern varied tremendously depending on what type of institution the students attended. At 2-year institutions, roughly one-third (3.1) of students' courses were remedial/ developmental, while the remainder were lower level courses (6.3). At 4-year institutions, the number of remedial/developmental courses was much lower (one-tenth of all courses, or 0.9 courses), and the number of lower level courses was much higher (8.9 courses). Students at doctoral institutions took the most lower level courses (10.6), while the number of remedial/ developmental courses (0.7) was roughly the same as at 4-year institutions. Only students at 4-year and doctoral institutions took upper level courses (0.3 and 0.4, respectively).

Number of Credits Taken

Overall, SSS students earned a mean of 21.9 credits in their freshman year (Figure 4-1).[4] Students at 2-year institutions earned the fewest credits (19.9), while students at doctoral institutions earned the most (23.8). One reason for the differences among the three types of institutions is the difference in full-time/part-time status at different institutions; as noted earlier in Chapter 2, only 66 percent of students at 2-year institutions were full time, compared with 80 percent at 4-year institutions. Another factor is that students varied in the number of courses taken for no credit, with students at 2-year and doctoral institutions taking more such courses on average than students at 4-year institutions.

The great majority of credits that were earned overall (18.1 of 21.9) were at the lower level, while students earned a mean of 2.8 credits in remedial/development courses, 0.6 credits in upper level courses, and 0.4 credits in introductory courses (Table 4-3). Because remedial/ developmental courses were often not-for-credit courses, the percentage that they formed of all credits earned (13 percent) tends to understate their frequency in many students' schedules.

Figure 4-1. Mean number of total credits earned by Student Support Services (SSS) freshmen: 1991-92



SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Transcript Study*, 1991-92.

Table 4-3. Mean number of credits earned by course level: 1991-92

Institutional characteristic	Remedial/ develop-mental	Introductory	Lower level	Upper level
Total	2.8	0.4	18.1	0.6
Type of institution				
2-year	6.9	0.1	12.9	0.0
4-year	1.9	0.6	18.9	0.7
Doctoral	0.1	0.0	22.7	1.0

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Transcript Study*, 1991-92.

Students at 2-year institutions earned roughly two-thirds of their credits in lower level courses (12.9 credits), while almost all of their remaining credits were in remedial/developmental courses (6.9). By contrast, students at 4-year and doctoral institutions earned many more credits in lower level courses 18.9 and 22.7, respectively), along with some upper level credits (0.7 and 1.0); for these students, relatively few credits were earned in remedial/ developmental courses (1.9 and 0.1). Given that SSS students at doctoral institutions averaged 0.7

[4] To correct for the different way that credits are calculated at institutions using the quarter system (rather than semesters), the number of credits earned in the quarter system were multiplied by two-thirds.

remedial/developmental courses but only 0.1 credits (despite the overall tendency to average roughly two credits per course), this is one major area where patterns based on credits were different than those based on the numbers of courses; this was not as true at other institutions, where the number of remedial/developmental credits were roughly twice the number of remedial/developmental courses (i.e., 6.9 credits versus 3.1 courses at 2-year institutions, and 1.9 credits versus 0.9 courses at 4-year institutions).

Course Work in Selected Subject Areas

The SSS students took a mean of 2.0 courses in English, 1.6 courses in mathematics, 1.5 courses in the social sciences, 0.6 courses in the life sciences, and 0.4 courses in the physical sciences (Table 4-4). Together, these five areas accounted for 6.1 courses out of a total of 10.3, or 59 percent.[5]

Table 4-4. Mean number of courses taken in selected subject areas by Student Support Services (SSS) freshmen: 1991-92

Institutional characteristic	Life sciences	Physical sciences	Math/ calculus	English	Social sciences
Total	0.6	0.4	1.6	2.0	1.5
Type of institution					
2-year . . .	0.4	0.2	1.6	1.8	0.9
4-year . . .	0.6	0.3	1.5	2.1	1.5
Doctoral .	1.0	0.9	2.3	2.2	1.9

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Transcript Study*, 1991-92.

Students at doctoral institutions took the greatest number of courses in each of these areas (a total of 8.3 courses in all five areas, or 68 percent), students at 4-year institutions were in the middle (6 courses, or 60 percent), and students at 2-year institutions took the least (a total of 4.9 courses, or 52 percent). The differences in course-taking patterns were smallest in English (ranging from a mean of 1.8 courses at 2-year institutions to 2.2 courses at doctoral institutions), and largest in the social sciences (ranging from 0.9 courses at 2-year institutions to 1.9 courses at doctoral institutions); however, if the life sciences and physical sciences are combined, they showed an even greater difference between 2-year and doctoral institutions (0.6 versus 1.9).

In terms of credits earned, these five subject areas accounted for roughly the same proportion of the SSS students' work as in terms of courses (13.2 of 21.9 credits, or 60 percent, versus 59 percent for the number of courses; Table 4-5 and Figure 4-1). Generally, the patterns were similar to those found based on the number of courses, except that with students typically earning multiple credits per course, the differences were larger in size. One small reversal appeared between mathematics and the social sciences: while students took very slightly more mathematics courses (1.6 versus 1.5),

Table 4-5. Mean number of credits earned in selected subject areas by Student Support Services (SSS) freshmen: 1991-92

Institutional characteristic	Life sciences	Physical sciences	Math/ calculus	English	Social sciences
Total	1.4	0.8	3.0	4.5	3.5
Type of institution					
2-year . . .	0.9	0.5	3.1	4.4	2.1
4-year . . .	1.3	0.7	3.0	4.4	3.8
Doctoral .	2.3	1.9	2.7	4.8	4.3

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Transcript Study*, 1991-92.

[5] Again, no correction in counting courses is made for the difference between courses taken within the quarter system and those taken within the semester system, but the number of credits (covered later in this section) is adjusted to a standardized measure.

more introductory in nature (thus possibly earning fewer credits), or that students were more likely to fail in mathematics courses, so that there was more difference between the number of credits attempted versus the number of credits earned.

Grade Point Averages

Institutions vary in the grading scales they use, so that grade point averages are not necessarily comparable from one institution to another. To standardize all of the SSS students' grades to a common system, the student grade point averages were recomputed using a 4.0 scale, with pluses and minuses being used to adjust a grade by 0.3 (e.g., an A- would be treated as a 3.7). The resulting numeric score was multiplied by the number of credits attempted to compute the average across multiple courses. Also, only courses taken for regular credit were included in the calculations.

Overall, the SSS students earned a mean grade point average (GPA) of 2.3 (Table 4-6). While one might anticipate that upper level courses were the hardest courses and thus would have the lowest GPAs, students actually earned the highest GPA in these courses (2.7), with lower GPAs in lower level courses (2.3) and introductory courses (2.1). (Remedial/developmental courses do not fit this general trend, with a mean GPA of 2.5; however, the sample of remedial/development courses used in calculating GPAs may be misleading, because most such courses were not taken for regular credit.) One possible reason may be that upper level courses were taken within areas that were the students' academic strengths, while the other courses were taken within a more general distribution, and may include required courses where students had more weaknesses.

Generally, there were only small differences among the SSS students based upon the type of institution they were attending. For example, the overall GPA was 2.4 at 2-year institutions and 2.3 at 4-year and doctoral institutions. The greatest exception where a relatively large difference did appear was in introductory courses, where the GPA was substantially higher at doctoral institutions (2.9) than at 2-year (2.2) or 4-year institutions (2.0). However, for doctoral institutions, these GPAs were based on relatively small numbers of courses.

Table 4-6. Mean GPA of Student Support Services (SSS) freshmen, by course level: 1991-92

Institutional characteristic	Overall	Remedial/ developmental	Introductory courses	Lower level	Upper level
Total	2.3	2.4	2.1	2.3	2.7
Type of institution					
2-year . . .	2.4	2.5	2.2	2.4	-
4-year . . .	2.3	2.2	2.0	2.3	2.7
Doctoral .	2.3	2.1	2.9	2.3	2.7

- No such courses at this type of institution.

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Transcript Study*, 1991-92.

There were larger differences in GPA based on the subject area in which the courses were taken, with the highest mean GPA in English (2.5), while the remaining subject area GPAs were either 2.1 (life sciences, physical sciences, and social sciences) or 2.2 (mathematics; Table 4-7). Again, however, as they were among the different course levels, the differences based on the type of institution the students were attending tended to be small within the individual subject areas.

Table 4-7. Mean GPA of Student Support Services (SSS) freshmen in selected subject areas: 1991-92

Institutional characteristic	Life sciences	Physical sciences	Math/ calculus	English	Social sciences
Total	2.1	2.1	2.2	2.5	2.1
Type of institution					
2-year	2.3	2.3	2.3	2.6	2.3
4-year	2.0	2.0	2.2	2.4	2.0
Doctoral	2.0	2.2	2.1	2.6	2.3

SOURCE: U.S. Department of Education, Policy and Evaluation Service, National Study of Student Support Services (SSS), *Transcript Study*, 1991-92.

APPENDIX A

SAMPLING METHODOLOGY

SAMPLING METHODOLOGY

The National Study of Student Support Services employs a three-component sample. In the first component, a sample of 200 institutions with mature (funded in both 1987 and 1990) SSS programs was selected for the mail and telephone survey. In the second component, a subsample of 30 institutions was selected for case studies, and in the third component, students were selected from these 30 institutions to be the longitudinal study participants.

Sampling Frame

The sampling frame consisted of institutions of higher education (IHE) with mature SSS programs (i.e., those programs that had been in operation for 3 years or longer) that were funded in 1990. These IHEs were identified by using the 1987-88 SSS project reports file. This was the latest listing at the time of sampling. This list contained 658 IHEs with relevant project data that met the requirements of studying mature programs. Fifty-five of the 658 mature programs were deleted from the frame because the institution did not apply for an SSS grant in 1990, or the institution applied for a grant but was unsuccessful in securing it. As a result, the final sampling frame contained 603 IHEs.

Sample of Institutions for Mail/Telephone Survey

A stratified sample of 200 IHEs was selected for the mail and telephone survey. The purpose of drawing this sample was to estimate characteristics of IHEs with SSS programs and characteristics of the programs themselves. The questionnaires had items about important descriptors of the SSS programs and about the policies of the IHE concerning delivery of SSS and similar services.

A total of 18 strata were created for the sampling. Of these, 15 were formed by crossing the level of the institution (2-year or 4-year), the institutional control (public or private), a race variable based on the majority race of the students in the institution (greater than 50 percent white, greater than 50 percent black, greater than 50 percent other minority, no one race greater than 50 percent), and the size of the SSS program. Programs were classified as small if the expected number of participants for the 1991-92 academic year was less than or equal to 200, and large if the expected number of participants was greater than 200. The final three strata contained all the institutions that (1) were located outside the coterminous 48 states (that is, in Alaska, Hawaii, and the territories), (2) were privately controlled 2-year institutions, or (3) had SSS programs that served only physically handicapped students. The institutions selected from these three strata for the mail and telephone survey were not eligible to be subsampled for the case studies due to the potentially high cost of conducting case studies at these projects or the uniqueness of the projects themselves.

The allocation of the sample to the various strata was done in proportion to the square root of the total number of SSS participants projected for the programs in the strata. The sample was selected differently depending on the strata size. One of the goals was to give schools with large SSS programs a higher chance of being sampled, while ensuring representation for the schools with small SSS programs.

For institutions with large SSS programs (more than 200 participants), sample selection within stratum was done systematically using a probability proportional to size method, where the measure of size was defined as the square root of the total number of SSS participants in the IHE. One IHE was selected with certainty due to its large size. For institutions with small SSS programs (200 or fewer participants) and those institutions in the final three strata, the sample was selected systematically within stratum with each institution having the same chance of selection. Within each stratum, the IHEs were sorted by geographic region prior to sampling. Table 1 shows the sampling frame and the sample allocation for the 18 strata.

Table 1. Sample allocation by strata

Program size	Strata	Measure of size	# units sampled: project survey	# units subsampled: case studies
Small SSS programs	1: 4-year, public, ≥50% white	68	19	3
	2: 4-year, public, ≥50% black	9	3	1
	3: 4-year, private, <50% black	46	12	2
	4: 4-year, private, ≥50% black	20	5	1
	5: 2-year, public, <50% black	94	25	4
	6: 2-year, public, ≥50% black	7	2	1
	Subtotal		66	12
Large SSS programs	7: 4-year, public, ≥50% white	2,272	52	8
	8: 4-year, public, ≥50% black	305	7	1
	9: 4-year, public, <50% black & <50% white	250	3	1
	10: 4-year, private, <50% black	463	10	1
	11: 4-year, private, ≥50% black	193	4	1
	12: 2-year, public, <50% white	1,191	27	4
	13: 2-year, public, ≥50% black	143	3	1
	14: 2-year, public, ≥50% other minority*	214	4	1
	15: 2-year, public, all other*	121	3	
	Subtotal		113	18
	*Strata 14 and 15 were collapsed when subsampling the case studies due to the small size of stratum 15.			
SSS programs that are unique	16: 100% participants are handicapped	13	4	NA
	17: Located outside coterminous U.S.	31	10	NA
	18: 2-year, private	25	7	NA
	Subtotal		21	

Subsample of 30 IHEs for Indepth Study Sites

The purpose of the selection of 30 sites was to obtain indepth knowledge of the characteristics of the SSS programs through case studies and of the students they assist through the longitudinal study student sample selected from the 30 sites. The scope and breadth of the SSS programs vary by IHE, and the case studies were conducted to closely examine how the programs operate in a subsample of IHEs. This subsample was not weighted back to any national totals due to the small sample of IHEs.

The indepth study sites were restricted to IHEs in the coterminous U.S. that were not 2-year private IHEs or IHEs with programs serving only handicapped participants. Therefore, the subsample of 30 IHEs was drawn from the 179 IHEs selected from strata 1 through 15. The same allocation scheme was used as for the 179 IHEs selected in the first stage. Strata 14 and 15 were collapsed together prior to subsampling due to the extremely small total measure of size in stratum 15. Table 1 shows how the subsample of 30 case studies was allocated by stratum.

In each stratum, an originally sampled IHE was selected, plus two alternates for each of the 30 sampled IHEs. These alternates replaced the IHE initially selected only if there was no possible way of obtaining required information from the sampled institution.

Subsample of SSS Participants Within the 30 IHEs

Within the 30 IHEs subsampled, samples of SSS participants were drawn and student surveys, service records, and student transcripts were collected to obtain an indepth look at the SSS programs.

Two samples of SSS participants were drawn within each IHE. The first sample consisted of first-time, full-time freshmen, and the second sample consisted of nonfreshmen.

Freshman Sample. For the first-time, full-time freshman SSS participants, the study design called for 3,000 completed interviews or an average sample size of 100 freshman participants from each of the 30 IHEs. Assuming an estimated 20 percent nonresponse rate, a target sample size of 125 first-time, full-time freshmen was set for each IHE (100/0.80 = 125).

If there were 125 or fewer freshman SSS participants in an institution, or if fewer than 125 were expected to participate in the project, then all freshman participants from that SSS program were selected. If there were more than 125 first-time, full-time freshman SSS participants, subsampling was done. Study staff requested lists of all freshman participants from these IHEs so that a systematic sample could be drawn. Sometimes a complete list was available at the time of sampling and was used to select the 125 participants. In many cases, no list was available and the sampling had to be done on a flow basis as students came to receive services. When the sampling was done on a flow basis, an estimate of the total number of SSS participants provided by the institution was used to specify the sampling rate for an IHE. This resulted in some variability in the actual sample size.

The sampling rate within institution was determined by rounding up the target sample size (125) divided by the estimate of the total number of freshman SSS participants in the IHE. For instance, if there were 200 freshman participants in a particular IHE, the rate would be 125/200 = 0.625, rounded up to 0.7. Sampling the participants was done based on the last digit of the student's ID or Social Security number. This method was determined to be sufficiently random for sampling. Based on the rate, a list of numbers between 0 and 9 were chosen. These numbers were sent to the IHE, since the IHEs were executing the sampling from the lists, and they were instructed to sample all participants whose ID ended in the sampled numbers. From our example with rate = 0.7, seven digits between 0 and 9 were chosen randomly, and all students with IDs ending in one of the seven digits were sampled.

In a few cases, more than 125 freshman participants were sampled in schools with large SSS programs due to smaller than projected numbers of freshman participants in IHEs where all the freshman were taken into the sample.

Service records were obtained for the sampled freshmen. However, due to a smaller than expected total number of freshman participants from SSS programs in the 30 IHEs, baseline surveys were done on all freshmen, not just those sampled. No service records were collected for the freshmen that were not initially sampled. Transcripts were requested on all freshmen in the 30 IHEs.

Nonfreshman Sample. For the nonfreshman SSS participants, 1,800 completed interviews were desired, resulting in an average sample size of 60 nonfreshman participants from each of the 30 IHEs. This sample size of 60 nonfreshman participants per IHE was adjusted for an estimated 20 percent nonresponse rate, resulting in a target sample size of 75 nonfreshmen per IHE (60/0.80 = 75).

If there were 75 or fewer nonfreshman participants, all were selected. When there were more than 75 nonfreshman SSS participants, a random sample was selected using the same sampling methods that were used for the freshmen.

Service records were obtained on the sampled nonfreshmen, but the sampled nonfreshmen did not complete baseline surveys and transcripts were not requested for them.

Subsample of non-SSS Participants Within the 30 IHEs

Within the 30 IHEs subsampled, a comparison sample of non-SSS participants was drawn for the longitudinal study. Separate samples of non-SSS participants were drawn within each IHE. A primary goal for each separate sample of non-SSS participants was that characteristics of the sample be similar to the corresponding sample of SSS participants (e.g., similar proportions of students from low income families in both samples). Within each IHE, the target sample size for the sample of non-SSS participants was set to 2/3 of the sample size of SSS participants.

Matched sampling methods were used to obtain a sample of non-SSS participants that was similar to the sample of SSS participants. In particular, the methodology was usually by propensity analysis (Rosenbaum and Rubin, 1985, *The American Statistician*, vol. 39, no. 1), and, in a few instances, by stratified matched samples. The characteristics considered for use in the matched sample were numerous, including age, race, gender, SAT score, high school GPA, family income, handicap, and first generation, to name a few. For each IHE, those characteristics that were associated with whether the student received SSS or not were identified.

In those instances where only a few characteristics were identified, and hence the IHE school population could be stratified into a dozen or fewer classes, then the non-SSS sample was selected by the stratified matched sampling method. By stratification into classes, within a class there would be n SSS participants and m non-SSS participants. Within this class $(2/3)n$ of the m non-SSS participants were randomly selected to be included in the non-SSS participant sample.

For example, the sample of non-SSS participants at University A was selected by stratified matched sampling. The characteristics associated with whether a student receives SSS or not were gender, receiving financial aid or not, and receiving a Pell grant or not. Thus, these three characteristics with two levels each generates $2^3=8$ classes. Within the class of males receiving both financial aid and a Pell grant, 8 students were receiving SSS and 184 students were not receiving SSS. Within this class 6* of the 184 students were not receiving SSS were randomly selected to be included in the non-SSS participant sample.

*Six is two-thirds of 8 after rounding to the next greater integer; applying this rule within each class the sample size of non-SSS participants may be slightly larger than two-thirds the sample size of SSS participants.

Overall, there were 899 freshmen at University A and 51 SSS participants. Applying the stratified matched sampling method a sample of 37 ($\approx$⅔n) non-SSS participants was achieved.

Most of the IHE non-SSS samples were selected using propensity analysis. When several characteristics associated to whether a student receives SSS were identified, the stratified matched sampling method becomes infeasible. The several characteristics generate a stratification with an intractable number of classes (e.g., five characteristics with three levels each generates 3^5=243 classes).

Briefly, the propensity analysis method works as follows. The several identified characteristics within an IHE are used to develop a logistic regression model that estimates the probability a student with a given set of characteristics receives SSS. This probability is called the propensity score. Not all of the identified characteristics would necessarily be included in the logistic regression model; if one was found to be a surrogate of another, or one could be explained by a combination of others, then that one characteristic was eliminated from the model.

A propensity score is then calculated for each student in the school. The matched sample of non-SSS participants is then selected such that the propensity scores of these students are similar to the propensity scores of the SSS participants. This is done by defining about 10 classes according to the propensity scores. Within a class there would be n SSS participants and m non-SSS participants. Then within this class (2/3)n of the m non-SSS participants are randomly selected to be included in the non-SSS participant sample.

For example, at University B the characteristics in the logistic regression model were race/ethnicity, high school GPA, SAT score, college, hours enrolled, family income, and Pell grant. Given these seven characteristics it is unlikely that for each SSS participant there would be a non-SSS student with identical characteristics. Instead, the propensity score was calculated for all 2,576 freshmen at University B. Then 12 classes according to the propensity score were defined, and within each class a sample of non-SSS participants was selected to achieve a matched sample of non-SSS participants paired to the sample of SSS participants. The distribution of propensity scores for the 143 SSS participants at University B is similar to the distribution of propensity scores for the 97 ($\approx$⅔n) non-SSS participants at University B.

Comparison Sample of Institutions

A nonprobability comparison sample of 20 IHEs that did not have grants to operate SSS programs in 1990-91 was selected from the Integrated Postsecondary Education Data System (IPEDS) file. The purpose of drawing this sample of 20 IHEs was to compare the differences between certain institutional and student body characteristics for IHEs with SSS programs in place and IHEs with no programs. The following institutions were excluded from IPEDS before the sample was selected:

(1) IHEs located outside the coterminous 48 states;

(2) Privately controlled 2-year institutions;

(3) IHEs with a missing FICE code;

(4) Private schools with in-state tuition of $7,000 or more (none of the SSS sample schools had tuition over this amount);

(5) United States Service Schools; and

(6) All IHEs with SSS programs, as determined by the 1987-88 SSS project reports file.

The remaining IHEs from which the comparison sample of 20 was drawn were placed into 20 strata, and one comparison institution was chosen per stratum. The 20 strata were formed by crossing the level of the institution (2-year, 4-year), a race variable based on the majority race of the students in the institution (greater than 50 percent black, all other), the admissions requirements (low, medium, high), and the enrollment (less than 2,000, 2,000-7,999, 8,000-

19,999, 20,000 or higher). The admissions requirements of the institution were based on the institution's selectivity, defined as follows: highly selective schools accept students in the top 25 percent of their high school class, medium selective schools accept all students in the top half of their class and some students from the lower half of their class, and low selective schools accept all high school graduates.

The 30 IHEs that were subsampled for case studies were placed in these 20 strata by using the same stratification variables as described above. The comparison IHEs were sampled subjectively by finding the IPEDS IHE that was the closest match to the SSS institution subsampled for case study. The key matching variables in defining "closeness" were geographic location, the total undergraduate enrollment, the percentage of students receiving Pell Grants, and the average ACT/SAT scores.

For each comparison school selected, two alternates were selected in case of refusal by the originally selected school. The alternates were the next two closest matches on the key variables.

Subsample of Non-SSS Participants within the 20 Comparison IHEs

Samples of non-SSS participants for the 20 comparison IHEs were drawn for participation in the longitudinal study. To reiterate the previous section, the 20 comparison IHE's do not have SSS programs, and there was one comparison IHE selected in each of the 20 strata. Further, the 30 SSS IHEs stratify into the 20 strata such that there were one or two SSS IHEs in each of the 20 strata. Thus, for each SSS IHE there was a single corresponding non-SSS IHE with the same stratification.

For each SSS IHE, there was a separate sample of non-SSS participants from the corresponding non-SSS IHE. Again, a primary goal for each separate sample was that characteristics of the sample be similar to the corresponding sample of SSS participants. And again, the target sample size for the sample of non-SSS participants was set to 2/3 of the sample size of the corresponding SSS participants. The methodology is very analogous to the methodology of selecting subsamples of non-SSS participants within the 30 IHEs; matched samples were selected using propensity analysis or stratified matched samples.

One modification was necessary in many subsamples. Often the characteristics used in the logistic regression model (or stratified matched sample) within an SSS IHE were not collected at the corresponding non-SSS IHE. A second logistic regression model (or stratification) for the SSS IHE would be developed using only characteristics that were collected at the corresponding non-SSS IHE as well.

Otherwise, the subsample was chosen analogously. The propensity scores (or stratification) of all students at the non-SSS IHE and the SSS participants at the SSS IHE were calculated. A number of classes according to the propensity scores (or stratification) were defined. Within a class there would be n SSS participants at the SSS IHE and m non-SSS participants at the non-SSS IHE. Then within this class $(2/3)n$ of the m non-SSS participants are randomly selected to be included in the non-SSS participant sample.

For example, the non-SSS IHE corresponding to University B was University C. The logistic regression model on University B had seven characteristics including college and family income. These two characteristics were not collected on the 2,751 freshmen at University C. A second logistic regression model was developed for University B with the following characteristics: race/ethnicity, high school GPA, SAT score, hours enrolled, and financial need. Using classes defined according to the propensity scores, corresponding to the sample of 143 SSS participants at University B a matched sample was selected of 97 ($\approx 2/3n$) non-SSS participants at University C.

Weighting Process for the Project Survey Data

In order to produce unbiased national estimates for the institutional component of the National Study of Student Support Services, the sample data need to be adjusted for differential sampling rates and nonresponse at the institution level. This adjustment was accomplished by assigning weights to each of the IHEs.

In the first stage of the weighting process, weights were assigned to the IHEs to adjust for the fact that not all IHEs were sampled with the same probability. The probability of selection of institution i, π_i, can be expressed as:

$\pi_i = 1$ if the IHE was selected with certainty

$\pi_i = n_h (S_i/S_h)$ if the IHE was not selected with certainty

where

n_h = number of noncertainty institutions in sample from stratum h

S_i = the measure of size assigned to IHE i (the square root of the number of SSS participants for the larger programs and a constant for the smaller programs)

S_h = the sum of the measures of size of noncertainty IHEs in stratum h.

Note that in the strata where the IHEs were sampled with equal probability (the smaller programs), π_i is simply n_h/N_h where N_h is the number of noncertainty institutions in the frame from stratum h.

The base weight for IHE i is the inverse of the probability of selection of the IHE. It can be written as:

$IHE\_WT_i = 1/\pi_i$.

Since not all IHEs agreed to participate in the study, the base weights were adjusted for nonresponse. Six collapsed strata were used in this adjustment. The nonresponse classes were formed as follows:

Strata	Nonresponse Class	Description
1-4	1	4-year IHEs with small SSS programs
5-6	2	2-year, public IHEs with small SSS programs.
7	3	4-year, public IHEs with >50 percent white students and large SSS programs.
8-11	4	All other 4-year, public IHEs with large SSS programs.
12-15	5	2-year, public IHEs with large SSS programs.
16-18	6	IHEs with SSS programs serving only handicapped students, 2-year, private IHE, geographic outliers.

The nonresponse adjustment factor for collapsed stratum h was the sum of the base weights for the sampled institutions in that stratum divided by the sum of the institution base weights for the participating institutions in that stratum. The nonresponse adjustment factor for collapsed stratum h can be written as:

$$NRADJ_h = \frac{\sum_{sampled\ IHEs} IHE\text{-}WT_i}{\sum_{participating\ IHEs} IHE\text{-}WT_i}$$

The nonresponse adjusted weight for IHE i in collapsed stratum h is the product of the

nonresponse adjustment and the institution base weight. It is:

$ADJWT_{hi} = IHE\_WT_i * NRADJ_h$.

This is the final weight that includes both the sampling and nonresponse adjustments.

Replicate Weights

Most statistical packages provide estimates of sampling errors assuming the sample is a simple random sample. The complex design of the SSS makes this assumption invalid. Therefore, it was decided to estimate the sampling errors of the estimates using a jackknife replication method. This method entailed dividing the sample into 36 variance strata of approximately equal size based on the original sample design for the survey, and computing estimates for each of these 36 replicates. The difference between the replicate estimates and the full sample estimate is used to estimate the sampling error of the statistic.

All of the noncertainty IHEs were placed in the same order within stratum as used in sampling and then assigned sequentially to the 36 variance strata in pairs. One of each of the two IHEs was assigned a 1 or 2, and this variable was called the pseudo-PSU. Psuedo-PSU refers to a block of institutions within a variance stratum. There was one certainty IHE, which was in all the variance strata since all of its replicate weights are one.

Each step of the weighting process was then replicated 36 times using the variance strata and pseudo-PSU assignments. The replicate weights were formed by dropping one unit from each variance stratum and doubling the weight for the other pseudo-PSU in that variance stratum. For example, in replicate one, the IHEs assigned to the first pseudo-PSU of the first variance stratum had their weights set equal to zero, while the IHEs assigned to the second pseudo-PSU in the first variance stratum had their weights doubled. The weights for all other IHEs were unaltered. Thirty-six replicate weights were created for each IHE. All of the weighting steps, including the nonresponse adjustment procedure, were then completed for each of the 36 replicate weights.

The replicate weights formed in this fashion can be used to estimate the variance or sampling error of an estimate. A replicate estimate is formed by applying the replicate weight to the characteristic or function of characteristics being estimated. Since there are 36 replicate weights, this results in 36 replicate estimates, $\hat{\theta}_k$. The variance of an estimate is estimated by the sum of the squares of the replicate estimates about the full sample estimate:

$$v(\hat{\theta}) = \sum_k (\hat{\theta}_k - \hat{\theta})^2.$$

The sampling error is just the square root of $v(\hat{\theta})$. The estimated variance and sampling errors for statistics can be computed using WESVAR and the JK2 option. WESVAR is a Westat-developed SAS procedure for computing sampling errors from complex samples. It should be noted that the JK2 OPTION statement is required to produce the appropriate estimate of the variance.

APPENDIX B: QUESTIONNAIRE

OMB NO. 1875-0062
EXP. 2/94

NATIONAL STUDY OF COLLEGE STUDENTS
AND STUDENT SUPPORT SERVICES

STUDENT INITIAL SURVEY

Dear Student:

The information in this form is being collected as part of a national study of the role of student support services in higher education. The study is sponsored by the United States Department of Education and is being conducted by Westat, an independent survey research organization. The research is being conducted in response to a Congressional mandate "to examine the effectiveness of current (student support) programs and to identify program improvements" (P.L. 101-106). Your voluntary participation in this research is being requested in order to achieve a better understanding of how students are affected by their college experiences. Identifying information is being requested in order to make subsequent followup studies possible. Information provided on this survey will be used for statistical purposes only and will not be used to determine or affect eligibility for any type of student service or financial aid. All responses will be held in strictest confidence. The survey should take about 20 to 30 minutes to complete.

Thank you for your assistance.

Sincerely,

Allen Ginsburg
Director, Planning and Evaluation Service
United States Department of Education

STUDENT BACKGROUND

PLEASE INDICATE YOUR RESPONSE BY FILLING IN THE BLANK OR CIRCLING THE APPROPRIATE CODE FOR EACH QUESTION.

1. What is your Social Security number?

   |_|_|_| |_|_| |_|_|_|_|

2. What is your birthdate?

   |_|_| |_|_| |1|9|_|_|
   MO DAY YEAR

3. What is your sex?

   Male 1
   Female 2

4. What is your marital status?

   Never married 1
   Married 2
   Separated 3
   Divorced or Widowed 4

5. Do you have any dependent children?

   Yes 1
   No 2

   If yes, enter how many _____

6. What is your race/ethnicity?

   American Indian 1
   Alaskan Native 2
   Black (not Hispanic) 3
   Mexican American 4
   Hispanic (not Mexican American) 5
   Asian or Pacific Islander 6
   White (not Hispanic) 7

7. In what year did you graduate from high school or obtain a GED? (ANSWER ONLY ONE)

   _____ Year graduated from high school

   _____ Year obtained GED

   _____ Year left high school but never obtained high school diploma

8. How many miles is this college from your permanent home?

   Under 50 1
   50 - 100 2
   Over 100 3

9. What were your scores on the SAT and/or ACT? (CHECK BOX IF DID NOT TAKE AND GO TO Q10. ☐)

   SAT Verbal ..... ___ ___ ___
   SAT Math ..... ___ ___ ___
   ACT Composite ..... ___ ___

10. What was your average grade in high school?

    A or A+ 1
    A- 2
    B+ 3
    B 4
    B- 5
    C+ 6
    C 7
    C- 8
    D 9

11. During high school (grades 9-12) how many years did you study each of the following subjects? (ANSWER FOR EACH ITEM)

    (ENTER "0" IF NONE)

    a. Mathematics ..... _____ years
    b. Foreign Language ..... _____ years
    c. Physical Science ..... _____ years
    d. Biological Science ..... _____ years
    e. Computer Science ..... _____ years

12. Since leaving high school have you ever taken courses at any institution other than the one you attended in the Fall of 1991? (CIRCLE ALL THAT APPLY)

    a. No 1
    b. Yes, at a junior or community college 2
    c. Yes, at a four-year college or university 3
    d. Yes, at some other postsecondary school (for example, technical, vocational, business) 4

13. Prior to the Fall 1991 term have you ever taken courses for credit at the institution you were attending last fall?

    Yes 1
    No 2

14. How many college credits did you earn prior to Fall 1991?

_____ (ENTER NUMBER)

(CHECK UNIT FOR NUMBER ENTERED)

- ☐ Semester/trimester credits
- ☐ Quarter credits
- ☐ Clock hours
- ☐ Other (Specify)

_____

_____

15. Other than high school advanced placement credits, in what year did you receive your first college credit?

|1|9|_|_| (ENTER NA IF YOU HAVE NOT YET RECEIVED COLLEGE CREDIT)

16. In Column A, enter the highest academic degree that you intend to obtain from the college you are now attending. In Column B, enter the highest academic degree that you ever plan to obtain from any college. (CIRCLE ONE IN EACH COLUMN)

	A. Highest Planned at this College	B. Highest Planned Ever
a. None	1	1
b. Vocational certificate	2	2
c. Associate's degree	3	3
d. Bachelor's degree or equivalent	4	4
e. 1 or 2 years of graduate study (master's degree)	5	5
f. Doctoral or professional degree such as M.D., Ph.D., etc	6	6

17. Where do you live during the school year? (CIRCLE ONLY ONE)

Dormitory or other college housing	1
Fraternity or sorority house	2
Private apartment or room within walking distance of the college	3
House, apartment, etc., away from the campus	4
With my parents or relatives	5

18. Most of the time when you were growing up, who lived in the same household with you? (CIRCLE ONE IN EACH ROW)

	YES	NO
a. Father or other male guardian (stepfather, foster father)	1	2
b. Mother or other female guardian (stepmother, foster mother)	1	2
c. Brothers or sisters	1	2
d. Grandparents	1	2
e. Other relatives (children or adults)	1	2
f. Other nonrelatives (children or adults)	1	2

19. Are you considered a full-time or part-time student by the institution you are attending?

Full time	1
Part time	2

20. During the time school is in session, about how many hours a week do you usually spend on activities that are related to your school work? This includes time spent in class and time spent studying.

_____ Hours per week

21. How many hours per day (on average) do you study outside of class?

Less than 1	1
1	2
2	3
3	4
4 or more	5

22. During the time school is in session, do you work for pay on a job?

Yes, on campus college work-study	1	(GO TO Q22A)
Yes, on campus but not college work-study	2	(GO TO Q22A)
Yes, off campus	3	(GO TO Q22A)
No, I do not work while school is in session	4	(GO TO Q23)

22A. How many hours per week do you work for pay when school is in session?

_____ Hours per week

23. Which of the categories below comes closest to describing your father's (stepfather or male guardian's), and mother's (stepmother or female guardian's) most recent job? (CIRCLE ONE IN EACH COLUMN; ANSWER FOR MOST RECENT JOB, EVEN IF HE OR SHE IS NOT WORKING AT PRESENT)

	A FATHER	B MOTHER
CLERICAL such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent	1	1
CRAFTSMAN such as baker, automobile mechanic, machinist, painter, plumber, telephone installer, carpenter	2	2
FARMER, FARM MANAGER	3	3
HOMEMAKER	4	4
LABORER such as construction worker, car washer, sanitary worker, farm laborer	5	5
MANAGER, ADMINISTRATOR such as sales manager, office manager, school administrator, buyer, restaurant manager, government official	6	6
MILITARY such as career officer, enlisted man or woman in the Armed Forces	7	7
OPERATIVE such as meat cutter, assembler, machine operator, welder, taxicab, bus, or truck driver	8	8
PROFESSIONAL such as accountant, artist, registered nurse, engineer, librarian, writer, social worker, actor, actress, politician, but not including school teacher	9	9
PROFESSIONAL such as clergyman, dentist, physician, lawyer, scientist, college teacher	10	10
PROPRIETOR OR OWNER such as owner of a small business, contractor, restaurant owner	11	11
PROTECTIVE SERVICE such as detective, police officer or guard, sheriff, fire fighter	12	12
SALES such as salesperson, advertising or insurance agent, real estate broker	13	13
SCHOOL TEACHER such as elementary or secondary	14	14
SERVICE such as barber, beautician, practical nurse, private household worker, janitor, waiter	15	15
TECHNICAL such as draftsman, medical or dental technician, computer programmer	16	16
Never worked	17	17
Don't know	18	18

24. What was the highest level of education your father (stepfather or male guardian) and mother (stepmother or female guardian) completed? (CIRCLE ONE IN EACH COLUMN)

		A FATHER	B MOTHER
Less than high school graduate		1	1
High school graduate or equivalent (include vocational, high school, or GED)		2	2
Vocational, trade, or business school after high school	Less than two years	3	3
	Two years or more	4	4
College program	Less than two years of college	5	5
	Two or more years of college (including two-year degree)	6	6
	Finished college (four- or five-year degree)	7	7
	Master's degree or equivalent	8	8
	Ph.D., M.D., or other advanced professional degree	9	9
Don't know		10	10

25. How far in school do you think your parents/guardians want you to go?

High school graduation	1
Vocational certificate	2
Associate's degree	3
Bachelor's degree or equivalent	4
1 or 2 years of graduate study (master's degree)	5
Doctoral degree such as M.D., Ph.D., etc.	6

26. Is any other language besides English spoken in your home?

Yes	1
No	2 (SKIP TO Q28A)

27. Using a scale of 1 to 4 with 1 = not very well, 2 = fairly well, 3 = well, and 4 = very well, how well do you:

a._____ understand English?
b._____ speak English?
c._____ write English?
d._____ read English?

28A. Did you apply for and/or receive financial aid for the 1991-92 school year? (CIRCLE ONE ONLY)

Yes, applied did not receive	1	(GO TO Q28B)
Yes, applied and received	2	(GO TO Q28B)
No, did not apply and did not receive	3	(GO TO Q28C)

28B. If you applied for or received financial aid, please indicate who helped you assemble your financial aid package.

	YES	NO
a. High school counselor	1	2
b. College counselor	1	2
c. Parent	1	2
d. Self	1	2
e. Bank	1	2
f. Other (Specify)		
_____	1	
_____	1	

28C. In Column A, circle all sources of funds for your educational expenses (room, board, tuition and fees) for this year. In Column B, circle the 3 major sources of your educational expenses.

	A. CIRCLE ALL SOURCES	B. CIRCLE UP TO THREE MAJOR SOURCES
a. Parents, other relatives, or friends	1	1
b. Spouse	2	2
c. Personal savings	3	3
d. Job during school year	4	4
e. Summer job	5	5
f. Grants or scholarships from institutions.	6	6
g. Grants or scholarships from any other source	7	7
h. Government loans	8	8
i. Loans from any other source	9	9

29. In 1991-92 have you or will you be:

	YES	NO
a. Living with your parents (for more than five consecutive weeks)	1	2
b. Listed as a dependent on your parents' Federal Income Tax return	1	2
c. Receiving assistance worth $600 or more from your parents	1	2

30. Are you participating in a work-study program at your school during the current school term? (CIRCLE ONLY ONE)

No	1
Yes	2

31. Do you have any concern about your ability to finance your college education? (CIRCLE ONE)

None (I am confident that I will have sufficient funds)	1
Some concern (but I will probably have enough funds)	2
Major concern (not sure I will have enough funds to complete college)	3

32. Do you have any of the following conditions?

	YES	NO
a. Specific learning disability	1	2
b. Visual handicap (not corrected by glasses)	1	2
c. Hard of hearing	1	2
d. Deafness	1	2
e. Speech disability	1	2
f. Orthopedic (skeletal) or mobility handicap	1	2
g. Specific psychological disorder	1	2
h. Other physical disability or handicap (SPECIFY)	1	2

_____

_____

STUDENT OPINIONS AND COLLEGE EXPERIENCES

33. In deciding to go to college, how important to you was each of the following reasons? (CIRCLE ONE IN EACH ROW)

	VERY IMPORTANT	SOMEWHAT IMPORTANT	NOT IMPORTANT
a. To be able to get a better job	1	2	3
b. To gain a general education and appreciation of ideas	1	2	3
c. To improve my reading and study skills	1	2	3
d. There was nothing better to do	1	2	3
e. To make me a more cultured person	1	2	3
f. To be able to make more money	1	2	3
g. To learn more about things that interest me	1	2	3
h. To prepare myself for graduate or professional school	1	2	3
i. My parents wanted me to go	1	2	3
j. I could not find a job	1	2	3
k. To get away from home	1	2	3
l. High school teacher or counselor encouraged me	1	2	3

34. What is the most important reason that you are attending THIS COLLEGE at this time? (CIRCLE ONLY ONE)

a. To prepare for transfer to a four-year college or university	1
b. To gain skills necessary to enter a career or occupation	2
c. To gain skills necessary to retrain, remain current, or advance in your current occupation	3
d. To satisfy personal interest (intellectual, cultural, social)	4
e. To improve English, reading, or math skills	5

35. About 50 percent of university students typically leave before receiving a degree. If this should happen to you, what would be the most likely cause? (CIRCLE ONLY ONE)

a. I am absolutely certain that I will obtain a degree	1
b. To accept a good job	2
c. To enter military service	3
d. It would cost more than my family could afford	4
e. Marriage	5
f. Disinterest in study	6
g. Lack of academic ability	7
h. Insufficient reading or study skills	8
i. Other (SPECIFY)	9

36A. During high school or just prior to entering college did you participate in any of the following? (CIRCLE ONE IN EACH ROW)

	YES	NO
a. Summer residential program to prepare for college	1	2
b. Summer nonresidential program to prepare for college	1	2
c. Tutoring given to you in math	1	2
d. Tutoring given to you in English, writing, or reading	1	2
e. Tutoring given to you in other subjects	1	2
f. Visits to college campus for orientation	1	2
g. College mentoring programs for high school students	1	2
h. Cultural or recreational enrichment programs	1	2
i. Volunteer work in the community	1	2
j. College selection or admissions counseling	1	2

36B. Have you ever participated in any of the following federal programs?

	YES	NO
a. Upward Bound	1	2
b. Veterans Upward Bound	1	2
c. Talent Search	1	2
d. Equal Opportunity Centers (EOC)	1	2
e. Other (SPECIFY)_____	1	2
_____		
f. Other (SPECIFY)_____	1	2
_____		

37A. In Column A, circle each service that you have used since beginning college.

37B. In Column B, circle each service that you expect to use in this or the next term.

37C. In Column C, enter how many times you have used or expect to use the service.

[CIRCLE ALL THAT APPLY]

Service	A. Have used this service	B. Plan to use this term or next term	C. Expected number of times have/plan to use per term (Count each session/service use as 1 use)
a. Services for physically disabled	1	1	_____
b. Services for students of limited English-speaking ability	2	2	_____
c. Student orientation	3	3	_____
d. Individual counseling	4	4	_____
e. Group counseling	5	5	_____
f. College re-entrance counseling	6	6	_____
g. Tutoring	7	7	_____
h. Classroom instruction in basic skills	8	8	_____
i. Classroom instruction in developmental English	9	9	_____
j. Classroom instruction in developmental math	10	10	_____
k. Cultural enrichment activities	11	11	_____
l. Referrals to health, employment, housing, and legal agencies and resources	12	12	_____

38. How often did you do each of the following during the 1991-92 year? [CIRCLE ONE IN EACH ROW]

	NEVER	ONCE	SOME-TIMES	OFTEN
a. Talk with faculty about academic matters in their offices	1	2	3	4
b. Meet with your advisor concerning your academic plans	1	2	3	4
c. Have informal or social contacts with your advisor or other faculty members	1	2	3	4
d. Participate in study groups with other students outside of the classroom	1	2	3	4
e. Go places such as concerts, movies, restaurants, sporting events, etc., with friends from the school	1	2	3	4
f. Participate in one or more student assistance centers or programs (e.g., counseling programs, the learning skills center, minority student services, health services)	1	2	3	4
g. Participate in school clubs (e.g., student government, religious clubs, service activities)	1	2	3	4
h. Attend career-related lectures, conventions, or field trips with friends	1	2	3	4
i. Participate in and practice with others for intramural or intercollegiate music, drama, choir, etc.	1	2	3	4
j. Participate in and practice with others for intramural or intercollegiate sports	1	2	3	4

39. How well do you like college? (CIRCLE ONLY ONE)

I am enthusiastic about it	1
I like it	2
I am more or less neutral about it	3
I don't like it	4

40. If you could start over again, would you go to the same college you are now attending? (CIRCLE ONLY ONE)

Yes, definitely	1
Probably yes	2
Probably no	3
No, definitely	4

41. Whatever your plans, do you think you have the ability to complete college? (CIRCLE ONLY ONE)

Yes, definitely	1
Yes, probably	2
Not sure	3
I doubt it	4
Definitely not	5

42. What were your grades last term and what do you think they will be when you graduate? 4 (CIRCLE ONE CODE IN EACH COLUMN)

	THIS TERM	WHEN YOU GRADUATE
a. Mostly A	1	1
b. About half A and half B	2	2
c. Mostly B	3	3
d. About half B and half C	4	4
e. Mostly C	5	5
f. About half C and half D	6	6
g. Mostly D	7	7
h. Mostly below D	8	8
i. Ungraded, a pass/fail program only	9	9

43A. Which of the following comes closest to describing your major field of study (or your expected major)? (CIRCLE ONLY ONE)

a. Agriculture 1
b. Arts (art, music, theater, etc.) 2
c. Biological Sciences (biology, biochemistry, botany, zoology, etc.) 3
d. Business 4
e. Computer Science 5
f. Education (including physical education and recreation) 6
g. Engineering 7
h. Health-related fields (nursing, physical therapy, health technology, etc.) 8
i. Humanities (literature, languages, history, philosophy, religion, etc.) 9
j. Physical Sciences (physics, chemistry, mathematics, astronomy, earth science, etc.) 10
k. Social Sciences (economics, political science, psychology, sociology, etc.) 11
l. Other (SPECIFY) 12

_____

m. Undecided 13

43B. Do you have definite career plans for after college?

Yes, definite 1
Yes, probable 2
No, not really sure of plans 3
No, not at all sure of plans 4

44. What kind of work do you think you will be doing in 5 to 10 years? **(MARK THE ONE THAT COMES CLOSEST TO WHAT YOU EXPECT TO BE DOING)**

(CIRCLE ONLY ONE)

CLERICAL such as bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent 1
CRAFTSMAN such as baker, automobile mechanic, machinist, painter, plumber, telephone installer, carpenter 2
FARMER, FARM MANAGER 3
HOMEMAKER 4
LABORER such as construction worker, car washer, sanitary worker, farm laborer 5
MANAGER, ADMINISTRATOR such as sales manager, office manager, school administrator, buyer, restaurant manager, government official 6
MILITARY such as career officer, enlisted man or woman in the Armed Forces 7
OPERATIVE such as meat cutter, assembler, machine operator, welder, taxicab, bus, or truck driver 8
PROFESSIONAL such as accountant, artist, registered nurse, engineer, librarian, writer, social worker, actor, actress, athlete, politician, but not including school teacher 9
PROFESSIONAL such as clergyman, dentist, physician, lawyer, scientist, college teacher 10
PROPRIETOR OR OWNER such as owner of a small business, contractor, restaurant owner 11
PROTECTIVE SERVICE such as detective, police officer or guard, sheriff, fire fighter 12
SALES such as salesperson, advertising or insurance agent, real estate broker 13
SCHOOL TEACHER such as elementary or secondary 14
SERVICE such as barber, beautician, practical nurse, private household worker, janitor, waiter 15
TECHNICAL such as draftsman, medical or dental technician, computer programmer 16
NOT WORKING 17

45. Which of the following ranges includes the current household income of the family with whom you resided when you were growing up? (CIRCLE ONLY ONE)

$5,000 or less	1
$5,001 to $10,000	2
$10,001 to $15,000	3
$15,001 to $20,000	4
$20,001 to $25,000	5
$25,001 to $30,000	6
$30,001 to $40,000	7
$40,001 to $50,000	8
$50,001 to $75,000	9
Over $75,000	10

46. Rate yourself on each of the following traits as compared with the average person of your age. We want the most accurate estimate of how you see yourself. (CIRCLE ONLY ONE IN EACH ROW)

	HIGHEST 10%	ABOVE AVERAGE	AVERAGE	BELOW AVERAGE	LOWEST 10%
a. Academic ability	1	2	3	4	5
b. Artistic ability	1	2	3	4	5
c. Drive to achieve	1	2	3	4	5
d. Emotional health	1	2	3	4	5
e. Leadership ability	1	2	3	4	5
f. Mathematical ability	1	2	3	4	5
g. Physical health	1	2	3	4	5
h. Popularity	1	2	3	4	5
i. Self-confidence (intellectual)	1	2	3	4	5
j. Self-confidence (social)	1	2	3	4	5
k. Writing ability	1	2	3	4	5

47. Please indicate the extent to which you agree or disagree with each of the following items. Respond to the statements below with your feelings at present or with your expectations of how things will be. (CIRCLE ONE IN EACH ROW)

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
a. The college should use its influence to improve social conditions in the state	1	2	3	4	5
b. It should not be very hard to get a "B" (3.0) average at this college	1	2	3	4	5
c. I get easily discouraged when I try to do something and it doesn't work	1	2	3	4	5
d. I am sometimes looked up to by others	1	2	3	4	5
e. If I run into problems concerning school, I have someone who would listen to me and help me	1	2	3	4	5
f. There is no use in doing things for people, you only find that you get it in the neck in the long run	1	2	3	4	5
g. In groups where I am comfortable, I am often looked to as a leader	1	2	3	4	5
h. I expect to have a harder time than most students at this college	1	2	3	4	5
i. Once I start something, I finish it	1	2	3	4	5
j. When I believe strongly in something, I act on it	1	2	3	4	5
k. I am as skilled academically as the average applicant to this college	1	2	3	4	5
l. I expect I will encounter racism at this college	1	2	3	4	5
m. People can pretty easily change me even though I thought my mind was already made up on a subject.	1	2	3	4	5
n. My friends and relatives don't feel I should go to college	1	2	3	4	5
o. My family has always wanted me to go to college	1	2	3	4	5
p. If course tutoring is made available on campus at no cost, I would attend regularly	1	2	3	4	5
q. I want a chance to prove myself academically	1	2	3	4	5
r. My high school grades don't really reflect what I can do	1	2	3	4	5
s. I usually feel comfortable on this campus	1	2	3	4	5

t. Please list offices held and/or groups belonged to in high school or in your community

_____ _____

_____ _____

48. What is your best guess as to the chances that you will: (CIRCLE ONE IN EACH ROW)

	VERY GOOD CHANCE	SOME CHANCE	VERY LITTLE CHANCE	NO CHANCE
a. Change major field?	1	2	3	4
b. Fail one or more courses?	1	2	3	4
c. Make at least a "B" average?	1	2	3	4
d. Need extra time to complete your degree requirements?	1	2	3	4
e. Have to work at an outside job during college?	1	2	3	4
f. Get a bachelor's degree (B.A., B.S., etc.)?	1	2	3	4
g. Drop out of this college temporarily (exclude transferring)?	1	2	3	4
h. Drop out permanently (exclude transferring)?	1	2	3	4
i. Transfer to another college before graduating?	1	2	3	4
j. Find a job after college in the field for which you are trained?	1	2	3	4
k. Get married while in college? (skip if married)	1	2	3	4
l. Get married within a year after college? (skip if married)	1	2	3	4

49. Please list 3 goals that you have for yourself right now.

1. _____

2. _____

3. _____

50. Please list 3 things that you are proud of having done.

1. _____

2. _____

3 _____

51. As part of this study, we are requesting your permission to obtain a copy of your college transcripts. This will allow us to better understand how actual courses taken relate to student experience in college. This information will be held in strict confidence and used only for statistical purposes.

May we obtain your transcripts from your college for use for statistical purposes?

Yes..... 1
No..... 2

INFORMATION FOR FUTURE FOLLOWUP

ID: |_|-|_|_|_|_|-|_|_|-|_|

PRINT your name, address and telephone number (where you can be reached during the coming year).

Your Name

Spouse's Full Name

Your Maiden Name

Street Address

City

State Zip Code

( )
TELEPHONE NUMBER

IN WHOSE NAME IS THE TELEPHONE NUMBER LISTED?
(CIRCLE ONE)

No phone 1
My name 2
Spouse's name 3
Other (PLEASE SPECIFY)_____ 4

PRINT name, address and telephone number of your parents (or one parent).

Parent's Name

Street Address

City

State Zip Code

( )
TELEPHONE NUMBER

IN WHOSE NAME IS THE TELEPHONE NUMBER LISTED?
(CIRCLE ONE)

No phone 1
Parent's name 2
Other (PLEASE SPECIFY)_____ 4

PRINT the names and address of two other people who will always know where to get in touch with you. (List no more than one person who now lives with you.) Remember to record the relationship of these persons to you (for example, friend, sister, cousin, etc.).

Name

Street Address

City

State Zip Code

Relationship to you

( )
TELEPHONE NUMBER

IN WHOSE NAME IS THE TELEPHONE NUMBER LISTED?
(CIRCLE ONE)

No phone 1
Person listed here 2
Other (PLEASE SPECIFY)_____ 4

Name

Street Address

City

State Zip Code

Relationship to you

( )
TELEPHONE NUMBER

IN WHOSE NAME IS THE TELEPHONE NUMBER LISTED?
(CIRCLE ONE)

No phone 1
Person listed here 2
Other (PLEASE SPECIFY)_____ 4

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APPENDIX C: FRESHMAN FILE REQUEST FORM

FILE LAYOUT AND DOCUMENTATION

National Study of Student Support Services

Preferred File Layout

Ref.	Start/ End Fields	Field Length	Field Description	Alternative Layout Documentation*	
	A.	**Locating and Identifying Information**			
AA	1-2	2	Field check AA		
AB	3-17	15	Student's Last Name	Field specification	_____
AC	18-29	12	Student's First Name	Field specification	_____
AD	30-41	12	Student's Middle Name or Initial	Field specification	_____
AE	42-56	15	Student's Maiden Name	Field specification	_____
AF	57-71	15	Social Security Number	Field specification	_____
AG	72-86	15	Student Institution ID	Field specification	_____
AH	87-126	40	Student's Local Address (Street/Box Number/Apt. No.)	Field specification	_____
AI	127-146	20	Student's Local City Address	Field specification	_____
AJ	147-148	2	Student's Local State Address (abbreviation)	Field specification	_____
AK	149-157	9	Student's Local ZIP Code	Field specification	_____
AL	158-172	15	Student's Local Telephone With Area Code	Field specification	_____
AM	173-212	40	Student's Permanent Address (Street/Box Number/Apt. No.)	Field specification	_____
AN	213-232	20	Student's Permanent City Address	Field specification	_____
AO	233-234	2	Student's Permanent State Address	Field specification	_____
AP	235-243	9	Student's Permanent ZIP code	Field specification	_____
AQ	244-258	15	Student's Permanent Telephone With Area Code	Field specification	_____
AR	259-273	15	Paren ame (Last Name)	Field specification	_____
AS	274-285	12	Parent's Name (First Name)	Field specification	_____
AT	286-297	12	Parent's Middle Name or Initial	Field specification	_____
AU	298-337	40	Parent's Permanent Address (Street/Box Number/Apt. No.)	Field specification	_____
AV	338-357	20	Parent's Permanent City Address	Field specification	_____
AW	358-359	2	Parent's Permanent State Address	Field specification	_____
AX	360-368	9	Parent's Permanent ZIP Code	Field specification	_____
AY	369-383	15	Parent's Telephone With Area Code	Field specification	_____

* additional or other pages if necessary to provide documentation for file layout and codes for variables included.

Preferred File Layout

Ref.	Start/ End Fields	Field Length	Field Description		Alternative Layout Documentation*
B.	**Student Background Characteristics**				
BA	384-385	2	Field Check BA		
					Gender
BB	386	1	Gender	field specification	
			1 = Male	codes	
			2 = Female		
			9 = Not available	NA codes	
					Month of Birth
BC	387-388	2	Month of Birth	field specification	
			01-12	codes	
			99 = not available	NA codes	
					Day of Birth
BD	389-390	2	Day of Birth	field specification	
			01-31	codes	
			99 = not available	NA codes	
					Year of Birth
BE	391-392	2	Year of Birth	field specification	
			12-70	codes	
			99 = not available	NA codes	
					Marital Status
BF	393	1	Current Marital Status	field specification	
			1 = married	codes	
			2 = not married		
			9 = not available	NA codes	
					Num Dep Children
BE	394-395	2	Number of Dependent Children	field specification	
			00-15	codes	
			99 = not available	NA codes	

* additional or other pages if necessary to provide documentation for file layout and codes for variables included.

Preferred File Layout

Ref.	Start/ End Fields	Field Length	Field Description		Alternative Layout Documentation*
					Race/Ethnicity
BG	396	1	Race/Ethnicity	field specification	
			1 = Amercian Indian/Alaskan Native	codes	
			2 = Asian		
			3 = Black/Afro-Amer, nonhispanic		
			4 = Hispanic		
			5 = White, nonhispanic		
			9 = not available	NA codes	
					U.S. Citizenship
BH	397	1	U.S. Citizenship	field specification	
			1 = yes	codes	
			2 = no		
			9 = not available	NA codes	
					Phys Disab
BI	398	1	Any Physical Disability	field specification	
			1 = yes	codes	
			2 = no		
			9 = not available	NA codes	
					Learning Disab.
BJ	399	1	Any Learning Disability	field specification	
			1 = yes	codes	
			2 = no		
			9 = not available	NA codes	
					High School Diploma
BK	400	1	High School Diploma	field specification	
			1 = yes	codes	
			2 = no		
			9 = not available	NA codes	

* e additional or other pages if necessary to provide documentation for file layout and codes for variables included.

Preferred File Layout

Ref.	Start/ End Fields	Field Length	Field Description	Alternative Layout Documentation*
				GED /Equiv
BL	401	1	GED or Equivalent	field specification _____
			1 = yes	codes _____
			2 = no	_____
			9 = not available	NA codes _____
				High School Grade Point Average
BM	402-405	4	High School Grade Point Average (GPA 4 point scale)	field specification _____
			1.00-4.00	codes _____
			9999 = not available	NA codes _____
				High School Average letter grade
BN	406-407	2	High School Average letter grade	field specification _____
			01 = A	codes _____
			02 = B	_____
			03 = C	_____
			04 = D	_____
			05 = E	_____
			06 = F	_____
			99 = not available	NA codes _____
				High School Class Rank
BO	408-411	4	High School Class Rank	field specification _____
			0001-9998	codes _____
			9999 = not available	NA codes _____
				No. in HS Class
BP	412-415	4	Number in High School Class	field specification _____
			0001-9998	codes _____
			9999 = not available	NA codes _____
				State of High School
BQ	416-417	2	State of High School	field specification _____
			2 digit FIPS state abbrevations	codes _____
			99 = not available	NA codes _____

* additional or other pages if necessary to provide documentation for file layout and codes for variables included.

Preferred File Layout

Ref.	Start/ End Fields	Field Length	Field Description	Alternative Layout Documentation*
				Transfer Status
BR	418	1	Transfer Status (yes/no)	field specification _____
			1 = yes	codes _____
			2 = no	_____
			9 = not available	NA codes _____
				No. Transfer Credits
BS	419-420	2	Number of Transfer Credits	field specification _____
			01-40	codes _____
			99 = not available	NA codes _____
				Transfer Grade Point
BT	421-424	4	Transfer Grade Point	field specification _____
			1.00-4.00 (decimal)	codes _____
			9999 = not available	NA codes _____
				First Generation College (mother)
BU	425	1	First Generation College (mother)	field specification _____
			1 = yes	codes _____
			2 = no	_____
			9 = not available	NA codes _____
				First Generation College (father)
BV	426	1	First Generation College (father)	field specification _____
			1 = yes	codes _____
			2 = no	_____
			9 = not available	NA codes _____

* Use additional or other pages if necessary to provide documentation for file layout and codes for variables included.

Preferred File Layout

Ref.	Start/ End Fields	Field Length	Field Description		Alternative Layout Documentation*
C.	**Student Test information**				
CA	427-428	2	Field Check CA		
					SAT Score: Verbal
CB	429-431	3	SAT Score: Verbal 200-800 999 = not available	field specification codes NA codes	_____ _____ _____
					SAT Score: Math
CC	432-434	3	SAT Score: Math 200-800 999 = not available	field specification codes NA codes	_____ _____ _____
					ACT Score: English
CD	435-436	2	ACT Score: English 01-35 99 = not available	field specification codes NA codes	_____ _____ _____
					ACT Score: Math
CE	437-438	2	ACT Score: Math 01-35 99 = not available	field specification codes NA codes	_____ _____ _____
					ACT Score: Composite
CF	439-440	2	ACT Score: Composite 01-35 99 = not available	field specification codes NA codes	_____ _____ _____
CG	441-470	30	Institution Placement Test 1 Math (Specify name) _____	field specification	_____
					Score on Test 1 Math
CH	471-475	5	Score on Test 1 Math Specify range_____ 99999 = not available/applicable	field specification codes NA codes	_____ _____ _____

* Use additional or other pages if necessary to provide documentation for file layout and codes for variables included.

Preferred File Layout

Ref.	Start/ End Fields	Field Length	Field Description		Alternative Layout Documentation*
CI	476-505	30	Institution Placement Test 2 English (Specify name) _____	field specification	Placement Test 2 English _____
CJ	506-510	5	Score on Test 2 English Specify range_____ 99999 = not available/applicable	field specification codes NA codes	Score on Test 2 English _____ _____ _____
CK	511-540	30	Institution Placement Test 3 Other (Specify name) _____	field specification	Placement Test 3 Other _____
CL	541-545	5	Score on Test 3 Other Specify range_____ 99999 = not available/applicable	field specification codes NA codes	Score on Test 3 Other _____ _____ _____

* additional or other pages if necessary to provide documentation for file layout and codes for variables included.

Preferred File Layout

Ref.	Start/ End Fields	Field Length	Field Description		Alternative Layout Documentation*
D.	**Special Service Participation**				
DA	546-547	2	Field Check DA		
DB	548	1	Participant in any student support service program 1 = yes 2 = no 9 = not available	field specification codes code NA code	Participant in any student support service program
DC	549	1	Participant in any federal funded service program 1 = yes 2 = no 9 = not available	field specification codes code NA code	Participant in any federally funded student support service program
DD	550	1	Participant in any state funded service program 1 = yes 2 = no 9 = not available	field specification codes code NA code	Participant in any state funded student support service program
DE	551	1	Participant in any special service for handicapped 1 = yes 2 = no 9 = not available	field specification codes code NA code	Participant in any special services for handicapped program

*e additional or other pages if necessary to provide documentation for file layout and codes for variables included.

Preferred File Layout

Ref.	Start/ End Fields	Field Length	Field Description	Alternative Layout Documentation*
E.	**Student Enrollment Information**			
EA	552-553	2	Field Check EA	
EB	554-555	2	Month of First Enrollment at Your Institution 01-12 99 = not available	Month of First Enrollment field specification _____ codes _____ NA codes _____
EC	556-557	2	Year of First Enrollment at Your Institution 91 99 = not available	Year of First Enrollment field specification _____ codes _____ NA codes _____
ED	558-582	25	College Document codes used on separate page	College field specification _____ codes _____
EE	583-607	25	Major Document codes used on separate page	Major field specification _____ codes _____
EF	608	1	Freshman Division Status 1 = yes 2 = no 3 = inapplicable (do not have) 9 = not available	Freshman Division Status field specification _____ codes _____ _____ _____ NA codes _____
EG	609-610	2	Total Credits Earned at Institution Prior to Fall 1991 00-30 99 = not available	Total Credits Earned at Institution field specification _____ codes _____ NA codes _____
EH	611-612	2	Number of Courses Taken Fall 1991 01-25 99 = not available	Number of Courses Taken Fall 1991 field specification _____ codes _____ NA codes _____

* Use additional or other pages if necessary to provide documentation for file layout and codes for variables included.

Preferred File Layout

Ref.	Start/ End Fields	Field Length	Field Description	Alternative Layout Documentation*
				Full-time/Part-time Student Fall 1991
EI	613	1	Full-time/Part-time Student Fall 1991	field specification _____
			1 = full time	codes _____
			2 = part time	_____
			9 = not available	NA codes _____
				Current Hours Attempted Fall 1991
EJ	614-615	2	Current Hours Attempted Fall 1991	field specification _____
			01-25	codes _____
			99 = not available	NA codes _____
				Veteran Status
EK	616	1	Veteran Status	field specification _____
			1 = yes	codes _____
			2 = no	_____
			9 = not available	NA codes _____
				Conditional Admit Status
EL	617	1	Conditional Admit Status	field specification _____
			1 = yes	codes _____
			2 = no	_____
			9 = not available	NA codes _____
				State Resident Status
EM	618	1	State Resident Status	field specification _____
			1 = yes	codes _____
			2 = no	_____
			9 = not available	NA codes _____
				Dorm Occupancy
EN	619	1	Dorm Occupancy	field specification _____
			1 = yes	codes _____
			2 = no	_____
			9 = not available	NA codes _____

* additional or other pages if necessary to provide documentation for file layout and codes for variables included.

Preferred File Layout

Ref.	Start/ End Fields	Field Length	Field Description	Alternative Layout Documentation*
F.	**Student Financial Aid Information**			
FA	620-621	2	Field check FA	
				Financial Aid Application 1991-92
FB	622	1	Financial Aid Application 1991-92 1 = yes 2 = no 9 = not available	field specification _____ codes _____ _____ NA codes _____
				Financial Need Amount 1991-92
FC	623-627	5	Financial Need Amount 1991-92 00000-25000 99999 = not available	field specification _____ codes _____ NA codes _____
				Pell Grant Award Fall, 1991
FD	628	1	Pell Grant Award Fall, 1991 1 = yes 2 = no 9 = not available	field specification _____ codes _____ _____ NA codes _____
				Amount of Pell Grant Award for Fall, 1991
FE	629-632	4	Amount of Pell Grant Award for Fall, 1991 0001-5000 9999 = not available	field specification _____ codes _____ NA codes _____
				Work Study
FF	633	1	Work Study Fall, 1991 1 = yes 2 = no 9 = not available	field specifiction _____ codes _____ _____ NA codes _____
				Total Financial Aid
FG	634-638	5	Total Financial Aid Amount 1991-92 00001-25000 99999 = not available	field specification _____ codes _____ NA codes _____

* Use additional or other pages if necessary to provide documentation for file layout and codes for variables included.

Preferred File Layout

Ref.	Start/ End Fields	Field Length	Field Description	Alternative Layout Documentation*
				Parental Dependency
FH	639	1	Student Parental Dependency Status 1991	field specification _____
			1 = yes	codes _____
			2 = no	_____
			9 = not available	NA codes _____
				Student Income
FI	640-645	6	Student Income	field specification _____
			000001-999998	codes _____
			999999 = not available	NA codes _____
				Parent's Income
FJ	646-651	6	Parent's Income	field specification _____
			000001-999998	codes _____
			999999 = not available	NA codes _____

*e additional or other pages if necessary to provide documentation for file layout and codes for variables included.

Preferred File Layout

Ref.	Start/ End Fields	Field Length	Field Description		Alternative Layout Documentation*
C.	**Student Courses Taken (Fall 1991)**				
GA	652-653	2	Field check GA		
GB	654-683	30	Course 1 Name Enter name	field specification codes	Course 1 Name _____ _____
GC	684-687	4	Course 1 Number 0000-9998 9999 = not available	field specification codes	Course 1 Number _____ _____
GD	688-717	30	Course 2 Name Enter name	field specification codes	Course 2 Name _____ _____
GE	718-721	4	Course 2 Number 0000-9998	field specification codes	Course 2 Number _____ _____
GF	722-751	30	Course 3 Name Enter name	field specification codes	Course 3 Name _____ _____
GG	752-755	4	Course 3 Enrolled Number 0000-9998	field specification codes	Course 3 Enrolled Number _____ _____
GH	756-785	30	Course 4 Name Enter name	field specification codes	Course 4 Name _____ _____
GI	786-789	4	Course 4 Number 0000-9998	field specification codes	Course 4 Number _____ _____
GJ	790-819	30	Course 5 Name Enter name	field specification codes	Course 5 Name _____ _____

* Use additional or other pages if necessary to provide documentation for file layout and codes for variables included.

Preferred File Layout

Ref.	Start/ End Fields	Field Length	Field Description		Alternative Layout Documentation*
GK	820-823	4	Course 5 Number 0000-9998	field specification codes	Course 5 Number _____ _____
GL	824-853	30	Course 6 Name Enter name	field specification codes	Course 6 Name _____ _____
GM	854-857	4	Course 6 Number 0000-9998	field specification codes	Course 6 Number _____ _____
GN	858-887	30	Course 7 Name Enter name	field specification codes	Course 7 Name _____ _____
GO	888-891	4	Course 7 Number 0000-9998	field specification codes	Course 7 Number _____ _____

* Use additional or other pages if necessary to provide documentation for file layout and codes for variables included.