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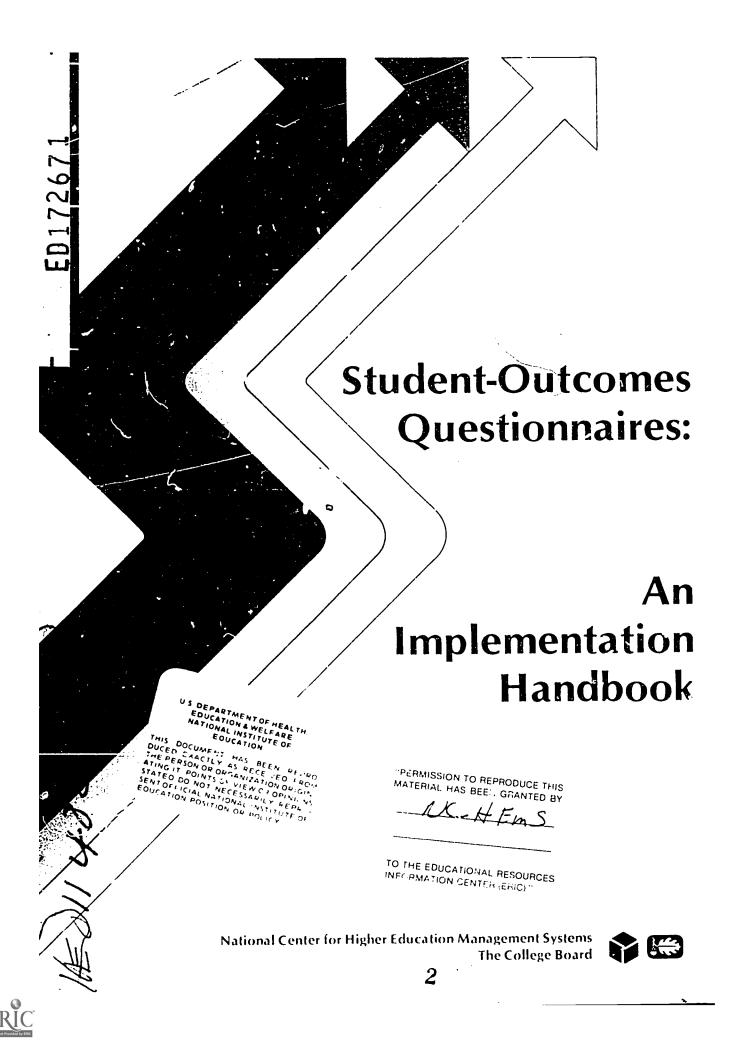
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## **Student-Outcomes Questionnaires:**

An Implementation Handbook

Robert G. Gray Edmund Jacobson Sidney S. Micek Cathleen Patrick Nancy Renkiewicz William Van Dusen

1979

National Center for Higher Education Management Systems P.O. Drawer P Boulder, Colorado 80302

and

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#### Preface

The Handbook presents a set of general guidelines for using the Student-Outcomes Questionnaires. The guidelines were developed by the National Center for Higher Education Management Systems (NCHEMS) and the College Board to conduct student-outcomes assessment studies in two-year colleges and in four-year colleges and universities. It also presents a set of procedures for using the questionnaire response-analysis service that is provided through the NCHEMS-College Board Student-Outcomes Information Services (SOIS) program. It is intended for use by researchers working in the area of student-outcomes assessment, by institutional administrators and faculty concerned with program planning and evaluation and institutional self-study, and by practitioners interested in obtaining information about student outcomes for decisionmaking purposes.

The Handbook and the Student-Outcomes Questionnaires have been developed over the past two and a half years. The initial version was published by NCHEMS as a field-review edition under the title A Handbook for Using the Student Outcomes Questionnaires (Bower and Renkiewicz 1977). The procedures presented in the initial version have since been pilot tested along with the field-review editions of the Student-Outcomes Questionnaires at four two-year colleges and three four-year colleges and universities. The four two-year colleges were Cuyahoga Community College, Cleveland, Ohio; Colorado Mountain College, Glenwood Springs, Colorado; the Penn Valley Campus of the Metropolitan Community College District



<sup>..</sup> Samples of the Two-Year College Student-Outcomes Questionnaires and the Four-Year College and University Student-Outcomes Questionnaires are presented in appendixes 1 and 2, respectively.

in Kansas City, Missouri; and the Yakima Valley Community College in Yakima, Washington. The four-year colleges and universities that served as pilot-test schools were Florida Technological University in Orlando, Florida: Fort Hays State College in Fort Hays, Kansas; and South Dakota State University in Brookings, South Dakota. The current *Handbook* and the Student-Outcomes Questionnaire are based on what was learned in the pilot-test activities and on suggestions from practitioners and researchers who reviewed them.

NCHEMS and the College Board decided to jointly develop the *Handbook*, the Student-Outcomes Questionnaires, and the new Questionnaire Response-Analysis Service because both organizations recognized that postsecondary-education practitioners and researchers need improved approaches for obtaining and using student-outcomes information. As a result of this joint centure, NCHEMS and the College Board have formed the Student-Outcomes Information Services program. The SOIS program is intended to accomplish the following objectives:

- 1. To present users with a strategy for collecting student-outcomes information and integrating such information into a student-outcomes information system
- 2. To present guidelines for conducting both cross-sectional and longitudinal studies designed to obtain student-outcomes information
- 3. To present two sets of question naires, one to be used by two-year colleges and the other to be used by four-year colleges and universities, for conducting student surveys of (a) entering students, (b) continuing students, (c) former or nonreturning students, (d) program completers/graduating students, and (e) recent alumni
- 4. To provide a Questionnaire Response-Analysis Service for facilitating use of the questionnaires and providing easy-to-use computer printouts
- 5. To provide users with comparative student-outcomes data for use in interpreting their studies results

as a flexible guide for implementing the offudent-Outcomes Questionnaires that accompany it. That is, while the *Handbook* describes specific procedures for using the Student-Outcomes Questionnaires for conducting student-outcomes studies, users should modify them to meet particular study needs. Toward this end, the Student-Outcomes Questionnair—also have been designed to be flexible instruments. Each instrument has been designed to allow for the addition of 15 locally developed items. Similarly, the SOIS Response-Analysis Cervice has been developed in such a way as to accommodate the analysis of locally developed items. In short, the SOIS Handbook, Student-Outcomes Questionnaires, and Response-Analysis Service have been developed to meet the criteria of relevancy, usability, timeliness, and feasibility.



## Acknowledgments

Extensive assistance in the development and review of the *Handbook* and the Student-Outcomes Questionnaires contained herein have been provided by a wide range of practitioners and researchers interested in student-outcomes assessment. A debt of gratitude is owed to each of those persons. In particular, members of the Two-Year College Student-Outcomes Assessment Task Force and the Four-Year College and University Student-Outcomes Assessment Task Force were most helpful in providing comments and suggestions, and deserve special recognition.

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Special thanks are due to the people who attended the outcomes-assessment workshop sponsored by NCHEMS and Educational Testing Service for their insights and constructive comments about the field-review editions of the Handbook and the Student-Outcomes Questionnaires. The authors also wish to express appreciation to Drs. Oscar Lenning, JoAn Segal, and Roger Sell of the NCHEMS staff for their critical reviews of the Handbook and questionnaires. The authors also extend special thanks to Ginger Deisher, Nathan Gans, and William Johnston for their editing of the Handbook and Student-Outcomes Questionnaires, Lynn Phillips for typesetting and graphics, and to Clara Roberts of the NCHEMS staff for her efforts in coordinating the printing of the Handbook and Student-Outcomes Questionnaires. Finally, the authors wish to acknowledge Barbara Epp and Shirley Stuckey for the long hours they spent typing the many drafts of the Handbook and the questionnaires.



#### Introduction

Postsecondary-education institutions are faced with increasing demands for information about students. Legislators, budget and finance officers, institutional planners, departments heads, faculty, institutional researchers, trustees, and students are among those who seek such information. Fiscal managers and trustees are interested in the percentage of students who leave school and why. Department heads and faculty members need to know the planned major fields of new students. Institutional planners want information on student behavior over time, to accommodate changing trends in the use of student services. And students themselves want to know about the employment and postgraduate experiences of recent graduates, before committing themselves to a major field of study.

In addition to these internal demands for information, institutions are facing external reporting demands. Those participating in federal student-aid programs must provide information about retention and program completion to prospective students. Central governing boards and state planning commissions frequently request information about program utilization, elegrees granted, and success of students.

Much of this information can be obtained by surveying or interviewing students. Institutions can develop specific local questionnaire materials or interview strategies as needed. But considerable time, money, and staff are needed to develop a framework for organizing, collecting, and integrating needed data into an understandable format. Even when those difficulties are overcome, there is a waste of resources implicit in the duplication of effort that occurs as time and money are spent for



similar developmental processes across institutions. And most likely, the data from specific local sources will not be comparable with information from another institution.

The alternative to developing local survey instruments and interview guides is the administration of pretested standardized instruments that collect information known to be useful and for which an analysis framework is available. The NCHEMS-College Board Student-Outcomes Information Services (SOIS) provides this support to institutions by offering:

- A plan for collecting student-outcomes information and integrating it into a student-outcomes information system
- General guidelines for conducting studies to obtain cross-sectional or longitudinal student-outcomes information at the postsecondaryeducation level
- Specific questionnaires for conducting student surveys
- A questionnaire-response analysis service that provides easy-to-use computer printouts of analytical information

Additionally, the SOIS includes a set of questionnaires and services specifically desired for use by community colleges (see appendix 1) and another especially developed for four-year colleges and universities (see appendix 2).

The Handbook is intended both as a general guide to using the SOIS Student-Outcomes Questionnaires in community colleges and in four-year colleges and universities, and to using the services provided through the NCHEMS-College Board Student-Outcomes Information Services. The remainder of this section addresses these questions:

- What are "student outcomes?"
- What kinds of students and outcomes do the SOIS questionnaires study?
- How were the SOIS questionnaires developed and how do they fit together?
- How can student-outcomes information be used?
- What is planned for the SOIS question naires?

The subsequent sections of the Handbook deal with developing:

- A plan for collecting data about student outcomes
- Guidelin is for planning and administering questionnaire surveys
- Guidelines for using the SOIS Questionnaire-Analysis Service
- Guidelines for coding, processing, and analyzing the SOIS's udentoutcomes data
- Uses for the results of the SOIS surveys



#### WHAT ARE STUDENT OUTCOMES?

There are numerous definitions and explanations of the term student outcomes as related to the postsecondary-education process. Perhaps the most straightforward approach is to define a student outcome as the consequence of a student's enrollment in an educational institution and involvement in its programs. Student outcomes can be cutputs (directly linked to the education process) or they can be impacts (indirectly linked to the education process). For example, an educational output is a student's acquisition of new facts and skills because of attendance in a particular course. Converely, an educational impact is a student's increased interest in civic affairs after college, stimulated in part by political science and sociology courses taken. Student outcomes of one educational system may become inputs to other educational systems. For instance, students receiving associate degrees from community colleges (community-college outputs) often enter fouryear colleges or universities (the inputs to four-year colleges or universities). Similarly, student outcomes that occur while a student is enrolled in a program can affect and are inputs to other choices and other outcomes of the same educational program. A student's choice of major as a sophomore, for example, clearly affects subsequent educational outcomes.

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Several other distinctions also can be made among student outcomes. Some outcomes are intended; others are accidentally produced. Some are easy to measure (the earning of a degree); others are more difficult to measure (the improvement in the ability to think critically). Some outcomes involve change in student knowledge, skills, attitudes, or activities; others preserve student knowledge, skills, attitudes, or activities.

And so we find that student outcomes is defined or explained in numerous ways. For further elaboration and discussion of these distinctions and their sources in the literature, the interested reader is referred to A Structure for the Outcomes of Postsecondary Education (Lenning, Lee, Micek, and Service 1977); The Outcomes Structure: An Overview and Procedures for Applying It in Postsecondary Institutions (Lenning 1977); and Previous Attempts to Structure Educational Outcomes and Outcomes-Related Concepts: A Compilation and Review of the Literature (Lenning 1977).

## What Students and Outcomes Do the SOIS Questionnaires Study?

The primary emphasis of the Student-Outcomes Information Services is on providing information about student outcomes that result from the postsecondary-education process. Given this emphasis, the SOIS questionnaires provide an institution with important information about students, including their characteristics, backgrounds, goals, attitudes, satisfactions, reasons for making certain decisions, activities, educational plans, occupational choices, and achievements. Both the Community College series and the Four-Year College/University series of the SOIS questionnaires obtain the following information:



- 1. Entering-Student Questionnaire. Baseline data obtained by a survey of entering students using this questionnaire include demographics, educational and occupational experience and plans, sources of anticipated funding for college costs, goals in attending school, and reasons for selecting the particular institution.
- 2. Continuing-Student Questionnaire. This questionnaire is administered to students who continue to reenroll at the institution or to students who reenroll after being away from the institution for a term or more. The survey instrument has been designed to obtain data about student characteristics and background, current and long-range goals, employment status, and need for, use of, and satisfaction with services provided by the college.
- 3. Former-Student Questionnaire. This questionnaire is administered to any student who leaves the institution without completing a formal program and receiving a degree or certificate. In addition to demographic and background data concerning students' experiences and progress at the institution, a survey using this questionnaire provides detailed information about the goals achieved by former students, reasons they did not return to this school, and their impressions of various institutional services.
- 4. Program-Completer/Graduating-Student Questionnaire. This questionnaire is administered to any student who is about to earn a degree or certificate from a college or university. A survey of students using this questionnaire provides demographics, background data, and information on students' satisfaction with various institutional services, as well as students' ratings of how well the school helped them reach their goals. The survey also provides information about students' future educational plans.
- 5. Recent-Alumn. Questionnaire. A survey of former students enrolled in degree, certificate, or vocational programs provides demographic and background data on students' experience at the college as well as considerable detail about the first degree program a student enrolled in since leaving the school and the first full-time job a student held since leaving the school. These questionnaires are to be administered between three months to one year after students have left the school.

#### HOW WERE THE QUESTIONNAIRES DEVELOPED?

The measures included in the community-college quest emaires series and the four-year college and university questionnaires series were developed partly as a result of preliminary pilot-test work that began in 1973 and continues today with a number of colleges and universities. In addition to this ongoing field work, NCHEMS-College Board staff reviewed many questionnaires and survey reports written by institutional researchers studying various aspects of two-year and four-year college and university educational outcomes. Two surveys (Micek and Arney 1974; Romney 1976) that assessed the relative importance of various outcomes measures to different types of institutional decisionmakers also were used in identifying the items to be included in these questionnaires.

Most items in the two series of questionnaires have been tested individually, either on previous versions of the SOIS questionnaires or on comparable questionnaires such as the Bureau of Census Educational Attainment Survey or the Cooperative Institutional Research Program Survey of Entering Freshmen that is sponsored jointly by the American Council on Education and the Higher Education Research Institute of the University of California at Los Angeles. Pilot testing of both current series of questionnaires took place during 1977. (The communitycolleges series was pilot tested at Colorado Mountain College, the Metropolitan Campus of Cuyahoga Community College, the Penn Valley campus of the Metropolitan Community College District, and Yakima Valley Community College; the Four-Year College/University series was pilot tested at South Dakota State University, Florida Technological University, and Fort Hays State College.) The final versions of the currently available questionnaires were developed in consultation with actual users of the field-test versions at those institutions. In addition, the new questionnaires have been reviewed by students and former students to enhance the reliability and validity of the instruments.

All five questionnaires in each series can be used in sequence to collect longitudinal data or they can be used separately to collect data about a particular group of students or a specific problem, such as student retention. With periodic administration of these questionnaires, an institution can measure the progress of its students and the impacts of the institution on its students. Data obtained from longitudinal outcomes studies can be compared with previous studies within the institution as well as with similar data obtained from other institutions that use the SOIS questionnaires. The SOIS comparative data reports, which will be part of the SOIS Response-Analysis Service, will be most valuable for helping an institution compare its study results with comparative data from institutions.

Each questionnaire has been designed to collect the most important information colleges and universities want at an appropriate time. For example, information about students' satisfaction with various college services is included on the Continuing-Student, Program-Completer/Graduating-Student, and Formar-Student Questionnaires since students' feelings and attitudes about these services



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are particularly timely. These questionnaires contain few questions about students' occupational plans because many students have not finalized their plans yet. The Recent-Alumni Questionnaire, on the other hand, intended for students who have been away from the college for three months to a rear, includes few questions regarding students' satisfaction with college services; instead it contains questions about alumni experiences concerning their first formal educational activities and first jobs after graduation.

Generally, institutions should find these instruments most valuable if they are viewed as an integrated system of questionnaires and not as "one-she" datagathering instruments. This use will provide an institution with important analytic capabilities through reviewing longitudinal student-outcomes data over time.

#### How Can Student-Outcomes Information Be Used?

The SOIS instruments and services have been developed to help community colleges and four-year colleges and universities improve institutional functioning and decisionmaking. Improvements can occur in a variety of ways. Student surveys can provide information that suggests the need for institutional change. A study of recent alumni or program completers, for example, may reveal that students from certain programs have difficulty getting accepted in further educational programs. An attrition study may reveal that a disproportionately high number of those who dropped out were concentrated in certain acad mic programs and that most left because of dissatisfaction with their major field. Each of these findings may suggest the need for program changes.

Outcomes studies can provide documentation of students' attitudes and activities related to institutional programs and services. For example, community-college personnel involved in the pilot testing of the Former-Student Questionnaire were pleased to find that most students who left were satisfied with their experiences at their schools. As administrators had suspected but had not been able to document, their community colleges were serving the important function of providing courses for the "occasional" student—the person who wants to take a course as time and money permits, but who does not intend to enroll in or complete a formal degree or certificate program. This information was valuable to the community colleges in demonstrating to funding agencie, that the college was performing a useful community service and that any high student-turnover rate was an expected outcome.

Outcomes studies also can provide information to help students with various decisions, such as choosing their program of study. Students are interested in such information as type of job obtained, starting salary, satisfaction with first job, acceptance into further educational programs, and particularly the current labor-market situation. Such information also is important to students deciding where to enroll. For example, "better information" studies conducted at NCHEMS and elsewhere indicate the importance of outcomes information for improving student decisions (Lenning and Cooper 1978).



Student-outcomes information collected at routine intervals and plotted over time can provide valuable and timely insights into student trends. Student-outcomes information can help detect changes in attrition levels, choices of major field, student attitudes, satisfaction with institutional services, decisions about further schooling, job availability, and so forth. Problems can be detected when they first occur so that corrective action, when necessary, can be instituted. This approach seems better than waiting until a problem is so large that it either cannot be resolved or requires major reallocation of institutional resources. Collecting student-outcomes information that is standardized allows similar institutions to compare the data and therefore is valuable.

While there is always some concern that comparable data exchange among institutions will be improperly used, particularly in a normative sense, enough valid reasons exist to justify and support the exchange of comparable student-outcomes information. Comparable data may illuminate problem areas within an institution while also showing that certain problems are common among institutions and perhaps not correctable by individual schools. A small midwestern college concerned about changing attrition trends, for example, is investigating the possibility that other similar colleges might be experiencing the same problem. Clearly, this will be easier to determine if comparable colleges collect attrition data in the same way. An institution using the Program-Completer/Graduating-Student Questionnaire may find that graduates from certain program areas have difficulty obtaining jobs. Comparable data from graduating students at other institutions can show whether the problem is universal or is limited to a single institution. Either finding could certainly lead to a different institutional course of action.

#### WHAT ARE THE FUTURE PLANS FOR THE SOIS QUESTIONNAIRES?

Samples of the current SOIS Two-Year College Questionnaires and the Four-Year College and University Questionnaires are in appendixes 1 and 2, respectively. The questionnaires are available to two-year colleges, four-year colleges and universities, and can be purchased directly from NCHEMS. In addition, NCHEMS and the College Board will be developing a sixth instrument, a follow-up questionnaire for alumni out of college three to five years. This questionnaire will be pilot tested during 1979 and will be added to both series of SOIS questionnaires when testing and revisions are finished.



# Developing a Student-Outcomes Data-Collection Plan

Many colleges need to know not only about student attitudes, activities, and plans at particular points in time, but also about changes in those plans, activities, and attitudes over time. For example, some institutions that need information about why specific kinds of students are dropping out will conduct an attrition study. Others may wish to routinely monitor students' progress through their institution and treat an attrition study as only one part of an overall plan for collecting longitudinal data. The questionnaires developed in conjunction with the *Handbool* are intended for both situations. That is, each questionnaire can be used by itself to survey a particular student group at a certain point in time—a cross-sectional survey plan. The questionnaires can also be used together to study a student cohort group over time by continually monitoring individual student plans, attitudes, and decisions—a longitudinal survey plan—to see how they change over time.

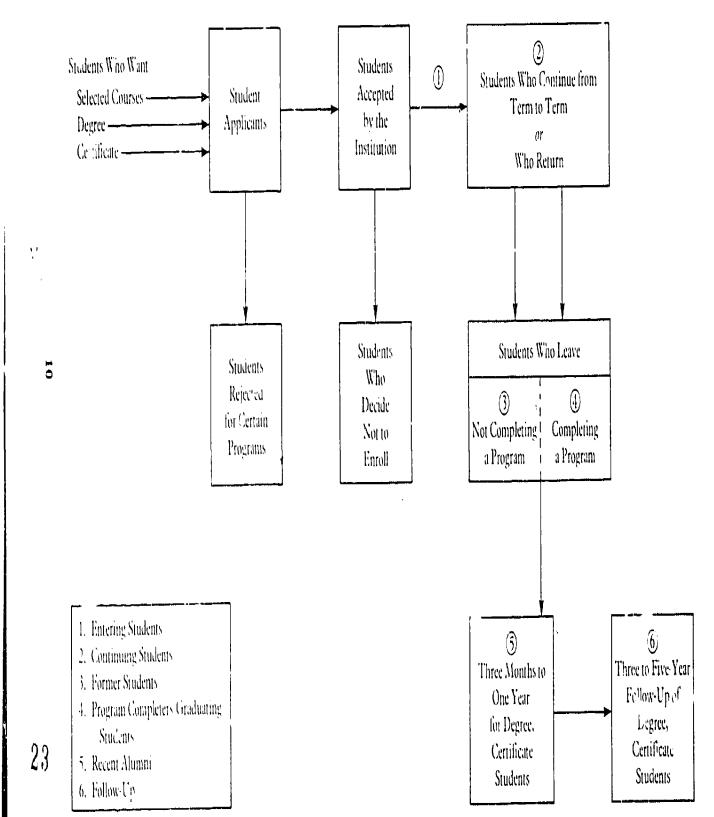
#### A PLAN FOR COLLECTING STUDENT-OUTCOMES DATA

Figure 1 illustrates the typical flow of students through colleges and universities and shows six suggested data-collection points:

- As a student enters (for a certificate or degree program or sele-red courses)
- While a student is enrolled



FIGURE 1
STUDENT-OUTCO AES DATA-COLLECTION POINTS FOR COLLEGES AND UNIVERSITIES



- After a student leaves without graduating or completing a formal program
- As a student completes a program or graduates (with either a degree or certificate)
- Three months to one year after a student has completed a program (degree, certificate, or other)
- Three to five years after a student has graduated

The six data-collection points suggested reflect the philosophy underlying the operations of most colleges and universities. Typically, college students enroll for a variety of reasons, ranging from personal enrichment or preparing for professional examinations to seeking a degree or certificate. Many students, especially those in the traditional 18-to-22 age range, continue from term to term until they meet their formal educational objectives. Others "drop in" and "drop out" to take courses as money, time, and interest allow and, as a result, do not move regularly and continuously through a prescribed program. To peak of dropouts makes little sense in such cases, since these students never enrolled in a degree or certificate program from which they could drop out. This indicates the importance of distinguishing between former students and graduat is or program completers, and following up the students who complete a degree or certificate program. Questionnaires for surveying students at five of the six points are currently available, and a questionnaire for following up students three to five years after they have completed their degree or certificate program will soon be added.

However, not all information collected at the six stages should be considered outcomes information in the sense of effects c, students caused by the institution. Rather, a good comprehensive plan for collecting student-outcomes data that permits the assessment of student change over time must include the gathering of data about students' abilities, background, and intentions before and during their enrollment. That is, such a plan must provide for the collection of baseline data. Given these baseline data, the assessment of student outcomes (changes in aspirations, type of job obtained, graduate-school program accepted into, satisfaction with experiences and services offered by the college) can be more efficacious, because of the ability to control for various types of student-input variables (age, sex, racial-ethnic status, handicapped status, high-school GPA, SAT or ACT scores, work experience).

These data-collection plans are flexible. Some institutions may not need or want to curvey students between the time they enter and graduate. Others may want to add an additional data-collection point.

#### Schedules and Administration Cycles

Once decisions have been made regarding the research/evaluation questions and the survey instruments to be used to obtain information needed to answer these



questions, two important issues must be confronted: scheduling—the optimal time of year to administer each survey instrument, and cycling—how frequently each type of questionnaire should be administered.

In general, surveys should be conducted at about the time that outcomes or events of interest happen to the student. This ensures that students can more easily recall their feelings, attitudes, reasons for decisions, and so forth. Thus the Entering-Student Questionnaire should be given to students with confirmation/acceptance materials when they register or shortly after they enroll. The Program-Completer/Graduating-Student Questionnaire should be given about two to four weeks before graduation. The Continuing-Student Questionnaire can be administered any time! during the academic year, depending on the information to be collected from the survey. The Former-Student Questionnaire should be administered as soon as students. To have not returned can be identified. (Many institutions may want to conduct only one former-student survey—for example, an attrition survey—each year. In this instance, a good administration time is shortly after the start of a new term. Spring semester or winter quarter is good if an institution wishes to stagger the time of administration of the various surveys in the possi.

Finally, because many of the questions deal voth students' first jobs or first college choices following graduation, the Rever amni Questionnaire should be administered three months to a year after respondents graduate or leave college. Surveys that ask alumni salaries, highest educational degrees earned, and other similar information are best administered several years after graduation when graduates have begun to follow relatively stable career paths. Figure 2 summarizes these scheduling suggestions.

The second issue to be considered in developing a plan for routinely collecting student-outcomes data is trult of the frequency of administration of each type of survey. Essentially, two questions should be considered: (1) how often should each type of survey be administrated to minimize cost and yet still provide up-to-date, useful information for the institution and (2) which surveys will yield to the institution data of sufficient importance and recevance to justify the cost and effort required to administer and process the question naires.

There are no desinitive answers: each institution must determine its own answers based on its resources and information needs. If there were few or no restraints on cost and staff time and little-concern about overburdening students with questionnaires, institutions might want to administer each type of questionnaire one or more times a year. Since these factors are in fact constraints at most colleges, conducing surveys so frequently is unrealistic. Surveys can be staggered effectively across several years if institutions remember that for most purposes



<sup>1.</sup> While this questionnaire can be administrated themeter appropriate throughout the year, certain times are less effective for obtaining student response, these include timediants before and after exam periodic holidays and vacations, and during special campus events. Administering the question times are in the afternoon and late in the school week also should be avoided if possible.

FIGURE 2
Schedule for Implementing Data-Collection Plan

Type of Survey	of Administered Once	If Administered at Each Opportunity	Additional Comments
Entering Student	Beginning of fall term	Beginning of each term that new students are accepted	Might be included with registration materials
Continuing Student	Near the point in time most information being collected		· v
Program Completer/Graduating Student	Neat the end of the spring term	Near the end of each term that students graduate	Might be included with materials for graduation
Former Student	Two weeks to one month after beginning of fall term, spring semester, winter quarter, or spring quarter	As soon after beginning of new term that nonreturning students from previous term can be identified	Might be included with materials required for withdrawal or leave of absence
Recent Alumni	Three mon hs to one year after spring graduation	Three months to a year after graduation	It is especially important when asking graduates about first job and first educational program after graduation to administer the questionnaire no more than nine months after graduation, to avoid confusion about which job and which new degree are being reserenced
Alumni Follow-Up	Three to five years after gra begun to follow relatively s	iduation when alam i have table career paths	•



longitudinal data will be the most useful to an institution (particularly for the purposes of investigating changes in student plans, attitudes, and decisions over time). Therefore while most institutions will not want to administer every survey every year, the plan should encompass the need to at least survey the same students over time. There are two solutions to this problem, each based on the premise that data from all entering students are critical to the development of a longitudinal data base:

- Survey every entering student group and then follow up each group as needed or according to a syclical plan such as is suggested by model I in figure 3.
- Survey all or a sample of *selected* entering student groups at set intervals (every two or three years) and follow up each group of surveyed entering students as needed or according to a cyclical plan such as is suggested by model 2 in figure 3.

By first collecting data from entering students and then basing the rest of the datacollection cycle on these students, an institution will be assured of having the critical information available in a longitudinal plan dealing with stuce an apput—plans, intentions, student background, and so forth.

Institutions should consider many other variations of the outcomes data-collection cycle. For example, another possible data-collection plan would be to administer the Entering-Student survey every two years and at times appropriate for each subsequent questionnaire, and then follow up the initial group of students as they progress through and out of the institution. Another plan would be to administer the Entering-Student and Former-Student surveys each year out conduct the Continuing-Student, Program-Completer/Graduating-Student, and Recent-Alumni surveys only to every third year's group of entering students. In this plan, every third year the institution would have new information concerning graduates, current students, and alumni/former students; each year they would have up-to-date information about entering students and former or no returning students.



FIGURE 3

Example Survey Administration Cycles

YEAR	1	2	3	4	5	6 .
MODEI, 1						
Entering Student	X	X	X	А	X	X
Former Student	X mid- term			X mid- term		
Program Completer		X			X	
Recent Alumni			X			X
MODEL 2						
Entering Student	X		X		X	
Former Student	X mid- term		X mid- term		X mid- term	
Program Completer		X		X		X
Recent Alumni	•		X		X	





# Guidelines for Planning and Administering Questionnaire Surveys

As defined by A.N. Oppennein (1973), a survey is a planned data-collection effort for the purpose of describing or predicting as a guide to action, or for the purpose of explaining the relationships between two or more variables. While most survey researchers attest that in practice there are as many purposes as there are surveys, they also agree that foremost in any survey effort is developing a clear definition and understanding of the objectives of the survey. To achieve this, the first step is delineating and clarifying specific problems to be studied, determining the critical questions to be answered, and considering possible uses for the survey results. This step is central to every survey because once accomplished, all the remaining steps in the survey process are "means to an end" and will flow logically.

In establishing the purposes of the survey, it is important to obtain input from those who will use the findings of the study. The larger the group to use the findings, the more diverse the objectives of the study will be. Generally the more objectives to a study, the greater its complexity and cost. Therefore it may be critical to set priorities among the objectives given time and monetary constraints.

In addition to identifying the specific purposes or objectives of the survey in this initial step, two other key questions should be considered:

• What concepts must be defined before the survey process continues?

In the formulation of any survey effort, certain concepts are used to communicate and organize one's thinking relative to the problems or questions in focus. For example, in a survey of former students, one



question of interest might address respondents' satisfaction with their vocational preparation. "Satisfaction" and "vocational preparation" in this context need to be translated into specific terms, so everyone clearly understands — it constitutes the acceptable indicators of these concepts.

• What assumption: will be made?

In many surveys, it is impossible to control all elements of the survey, such as the validity of certain parts of a questionnaire or the adequacy of the sample. Therefore stating the assumptions of a survey is important since they may affect the survey process as well as the interpretation of the survey results.

#### Institution-wide Involvement

Many different institutional personnel and constituencies may have an interest in the development and results of a questionnaire directed at students and former students. One vehicle for involving institutional staff and other interested groups is to establish an advisory committee comprised of students, faculty, and alumni. Not only can a committee of this type make recommendations concerning the administration and use of the questionnaire, but the committee can also suggest modifications to the questionnaire. Representatives from Student Services, Alumni Development, Admissions, Career Placement, Academic Administration, Vocational Administration, Data Processing, and Public Information offices may have an interest in the findings of the student-outcomes surveys. It may not be possible to include all of these representatives on the committee, but their involvement in certain stages of survey planning and implementation will help ensure better response rates, as well as facilitate actual use of the questionnaire results.

The involvement of a number of institutional personnel will guard against overlapping activities conducted in a number of different areas within the institution. In many institutions—large ones in particular—redundant survey efforts frequently are conducted by several offices, wasting time and money.

#### Supvey-Design Considerations

Once the objectives of the survey have been determined and the specific research/ evaluation questions identified, the appropriate survey design must be selected. Generally two basic designs—cross-sectional or longitudinal—are considered. A cross-sectional design is appropriate if the purpose of the survey is to collect data from a population of students only at a single point in time. A survey of former students—those who left the college before completing their degree program—to determine their reasons for leaving, their impressions while at college, and their current activities and plans is an example of a cross-sectional design.



If the purpose of the survey is to describe and explain changes in student progress, attitudes, or plans, over a period of time, a longitudinal survey design is appropriate. In deciding to do a longitudinal study, three primary designs are to be considered: trend, cohort, and panel. In a trend design, a general population (for example, students who enter the college) is sampled and surveyed at different times. For example, a trend-study design could be used to examine the changes in goals, attitudes, and aspirations of students who enter the college the fall terms of 1978, 1980, and 1982.

A cohort design studies the same population of students at different points in time although the samples drawn from the population will be different. An example of a cohort-survey design is surveying the entire entering group of students in the fall term of 1978 and then drawing random samples from this same student group one year later, at the time of program completion, and so on. In this design, it is possible to assess changes in a particular group of students based on different samples of that group over time.

While both trend and cohort study designs allow the assessing of changes in a group over time, neither indicates which students change; this hinders attempts to explain why changes occur. Panel designs avoid this problem, since they involve the collection of data from the same sample of students at different points in time. For this reason, the sample for such a study is referred to as the "panel." This type of longitudinal survey design has some problems, however. For example, attrition of students who compose the panel is a severe limitation. So is the potential Hawthorne Effect that can occur (panel members become less representative of the population from which they were originally selected, because they are continually singled out to respond to various data requests). For an in-depth discussion of the advantages and disadvantages of panel studies, cohort studies, and tre d studies, see Survey Research Methods (Babbie 1973).

#### SAMPLING CONSIDERATIONS

In every survey, the question must be asked: Should the institution survey all students or will a sample of students suffice? And if an institution elects to use a sample of students, how should the sample be selected, and how many should be in the sample? Again, the answers to these questions will ultimately be decided by staff at individual institutions.

For a variety of reasons, the total population of students should be surveyed if at all possible. Surveying the entire population avoids the necessity for restrictive assumptions about how a sample of that population's responses corresponds with those of the entire student body and provides a hedge against inadequate sampling. Surveying the total population also eliminates the need for random sampling or any similar procedure to identity which individuals in the population are to receive the questionnaire.

Because administering questionnaires to all students can be costly, particularly



ξ.

for colleges with a large enrollment, some institutions are unable to survey all students. One conspromise is to survey all entering students to obtain baseline data and then to select random samples of students from this population for administering later surveys.

If an institution decides against a survey of the total population the study will be restricted to a sample of the total population. However, careful procedures must be followed to ensure that the sample is large enough to permit valid inferences about the total population. The initial sample size for entering students also must take into account (1) the number of students available for surveying in subsequent years, and (2) whether the data-collection plan is longitudinal. Probably the easiest and most reliable method for choosing a sample of students is to select a simple random sample of students. Other sampling plans can also be considered (stratified random sampling, cluster sampling, and so forth). Those interested in a detailed discussion of sampling procedures may wish to consult *Elementary Survey Sampling* (Mendenhall, Ott, and Schaeffer 1971), a good introductory treatment, or *Sampling Techniques* (Cochran 1963), a more technically sophisticated discussion.

Whether the institution chooses to survey the entire population or a sample, it is important to obtain as high a response as possible. One aim of every survey is to generalize from returned responses the entire population of students of interest. As significant numbers of surveyed students fail to respond, response bias may occur, and the ability to reliably generalize to the entire population on the basis of returned questionnaires deteriorates. Generally response bias operates such that those who complete questionnaires are more positive toward the school and have stronger opinions than those who fail to respond. Response bias and strategies for increasing response rate are discussed in more depth in subsequent sections of the Handbook.

## OBTAINING AND ADAPTING THE SOIS QUESTIONNAIRES

The student-outcomes questionnaires developed by NCHEMS and the College Board can be obtained by using the order form included with the *Handbook* or by writing to NCHEMS l'ublications, P.O. Drawer P, Boulder, Colorado 80302 and requesting the type and number of each questionnaire needed. Institutions that wish to use one or all of the questionnaires may obtain them in the following way:

Purchase in bulk. The NCHEMS-College Board SOIS makes the individual questionnaires avail ble in bulk at a charge that covers the cost of



<sup>1.</sup> An easy method for randomic selecting students using the computer coro decide on the percentage of students to be sampled, then convert this percentage, say 20 per cm, to a fraction (20). The computer can then be programmed to generate a random number tuniformly distributed over the inverval zero is one) for each student record of ID as it is read. If the random number is less than or equal to the maction, the student is included in the simple, and if larger than, the fraction, the student is excluded from the cuple. Student provide for those in the sample can, during the execution of this program, be written into a new file for the case. The math discords done also without the computer, using a rable of random numbers.

printing and mailing questionnaires. Questionnaires ordered in this manner will be shipped within fire days of receipt of the order, facilitating rapid implementation of a survey. (See the SOIS order form for specific cost details.)

A question frequently asked by those reviewing the SOIS questionnaires for the first time is whether certain items (such as sex, race/ethnic group, grade-point average) are needed since the institution likely will have this information on its master-file records. Eliminating those kinds of items produces shorter questionnaires and might encourage better response rates. However, duplicating these kinds of items in the standard SOIS questionnaires is preferred because:

- The institutional master file may not include some of the items for all students or some items may be missing from the files of some students
- The data in the institutional master files may be outdated for some students
- Even if the data are complete and up-to-date, it may be administratively impossible for the survey research to obtain access to the master file
- Some institutions may wish to administer the questionnaires anonymously and consequently cannot access the master file for matching
- Mismatching questionnaires with master files may eliminate valuable analysis capabilities for certain respondents

Colleges with information in and access to institutional master files for whom these issues are not relevant may request permission to modify and duplicate the SOIS questionnaires locally, thus eliminating redundant items.

Some institutions may wish to add "local items" to the standardized SOIS questionnaires, to collect information relevant to their local situations and study needs. The SOIS questionnaires have been designed for such uses. In each questionnaire, spaces have been set aside that allow respondents to register their answers for up to 15 locally developed items.

Generally, the process for adding local items to the SOIS questionnaire involves three basic steps:

- I. The local items are developed. (In doing so, the response set for any single item can be no more than nine responses. This restriction is necessary for purposes of keypunching and analyzing the responses to each item.)
- 2. Specific instructions are written that tell respondents how to register their answers to each local item in the appropriate space in the SOIS standard questionnaire.
- 3. The attachment that includes the instructions and the local items is printed and attached to the SOIS questionnaire.



#### FIGUF E 4

## Example of Space Provided on the Questionnaires For Additional Local Questions

 19	20	21	22	23	cord you	 25	26	27	28	<u> </u>	30	11	32	33
			t <sub>e</sub> z											
	•,													
													-	Sec.
,														
				F										
	•													
٠														



#### FIGURE 5

## An Example of a Set of Local Questions Added to a Former-Student Questionnaire

Please record your answers to the following questions in the appropriate boxes provided for in the ADDITIONAL QUESTIONS SECTION of the questionnaire

19. How as no months has at home series you let our 21. It you do not plun to attend school within the next

- 19. How many months has it been some you lett our college? Enter your response in box 19.
  - 0. One month or less
  - 1. Two to six months
  - 2. Seven months to one year.
  - 3. More than one year.
- 20. How many times did you change your meror or area of study while enrolled at our college? Enteryour response in box 20
  - 0. Never declared a major or area of study.
  - 3. Never changed my major or area of study.
  - 2 One time
  - 1. Iwo times
  - 4. Three times
  - 5. Foar or more times.

- 21. If you do not plan to attend school within the next year, or are not currently attending school, what are you doing! Enter your response in box 21.
  - O. Intered or plan to enter military service.
  - 1. Looking to rayob.
  - 2. Working in a job.
  - 3. Caring for home and or family
  - 4 Traveling
  - 5. Not doing anything.

Other				 	



Figure 4 shows the spaces provided in each of the SOIS questionnaires for responding to locally developed items. Figure 5 presents a sample of a set of local items that have been developed as an attachment to an SOIS Former-Student Questionnaire. Further information about the development of local items and some suggested local items are presented in appendix 3.

### Alternatives for Administering the SOIS Questionnaires

Some of the questionnaires in the SOIS series (such as the Former-Student and Recent-Alumni) probably can be administered only by mail since the intended recipients may no longer be accessible in any other way. Others, particularly the Entering-Student and Continuing-Student Questionnaires, can be administered to students either by mail or some handout procedure.

In instances where specific students have been identified as respondents, arrangements will need to be made to deliver the questionnaires to the students. Also this will generally limit administration to mailing rather than handing out. If the sample has been drawn from official institutional rolls, mailing labels should be prepared at the time of sampling. Another alternative, feasible only with small samples, is to seek out the students and deliver the questionnaires. This has advantages, if there is time to wait for the student to complete the questionnaire in the presence of the researcher.

Where it is not necessary to assure that specific students respond to the questionnaire or where the total student body is to participate in the study, a number of different methods for administering the survey is available. One alternative is to give the questionnaires to instructors who will distribute and then collect them during class meetings. If all students are required to take a certain class, a sample of class meetings can be identified, perhaps all those meeting at 10:00 A.M. on Monday and 4:06 P.M. on Tuesday. If this method is used, care should be taken to assure that patterns of student attendance do not bias the sample. For example, fewer older, married and employed students may be enrolled in classes meeting during the day. Provision also should be made for absenteeism and failure of some instructors to administer the questionnaires.

Another method of using a captive audience is to distribute and then collect the questionnaires from students in the library. A sample collected in this manner, however, will be biased by the students who need library services on the day when the questionnaire is distributed. The accuracy of students' responses may also be diminished because they see the questionnaire as an instrusion on time otherwise planned for study.

Institutions with advance registrations can send the questionnaire out with registration materials and request the material be returned as part of the normal registration procedures. This method is effective when either the entire population or a sample of students is used. The advance planning time required for a study will be extended to the extent that the registration packets are prepared in advance



of their distribution and the length of time that students are given to return the registration materials.

Some groups of students possibly may be excluded if this mechanism is used. The transfer student who does not apply for admission in advance enough to be included in pre-registration, a student with academic difficulties who is not permitted to pre-register, those who cannot see counselors in time to arrange schedules before pre-registration, and students who are unsure whether they will return may be excluded. In addition, some students uncertain about returning may decide not to register if the questionnaire is seen as an unnecessary addition to what may already be perceived as a registration procedure that is too complicated.

Institutions that require students to report for registration can use that control administer the questionnaire. Forms can be distributed to students as they enter the registration area, space can be provided for the completion of the forms, and collection accomplished at the exit or at the place where fees are paid. The time needed to complete the questionnaire can slow down the registration process, but this may not be a serious disadvantage. All students who presumably will attend during the academic period can be included in the study, or a sample can be prepared by distributing the forms at various times during the registration period. If the latter method is used, an institution should be certain that cycles of registration (for example, transfers on one day and first-time students on another day) or time of registration (for example, students who are working presumably will register in the evenings or ca weekers or at lunch hour) does not bias the sample.

A separate mailing of a questionnaire directly to the student's residence assures that the questionnaire will receive more attention (at least initially) because it is not included with some other registration material that might be more interesting or more important. Further, it permits students to complete the questionnaire at their leisure with perhaps more thought directed at the answers. On the other hand, it permits the student total freedom to toss the questionnaire in a waste-basket. Also, if the questionnaire is administered anonymously, there is no way to tell how the group who returns the questionnaire corresponds to the overall group.

## COVER LETTERS AND MEMOS FOR THE SOIS QUESTIONNAIRES

Whether quest, anaires are mailed out or handed to students, cover letters or memos for the initial distribution and for any subsequent follow-up distributions should be included, explaining the purpose of the survey and how the results will be used. These letters or memos should be printed on institutional stationery and, is possible, signed by the president. The letter should:

- Convey the importance of a response from the student
- State that responses will! e confidential
- Emphasize the value to the student in responding to the questionnaire
- Not patronize the student



- Provide clear and specific directions about how to fill out the questionnaire. (In particular, the letter should tell respondents whether they should complete the Personal Identification Section of the questionnaire. Also, the letter should inform the respondent if local items have been attached.
- State when and how the question maire should be returned.

If a follow-up letter is sent, it should emphasize again that responses are confidential and should remind respondents of the importance to the institution of receiving as many completed questionnaires as possible.

# Cost Materials, and Personnel for Administering the Questionnaires

Figure 6 shows a list of materials required for the initial contact in mail and handout surveys along with their estimated costs. Costs are based on a survey of 1,000 students; surveys of larger or smaller numbers of students should be approximately proportional in cost to those shown. Most costs are self-explanatory in figure 6, except perhaps the first-class mailing expense. Research indicates that personalizing the survey materials increases the response rate substantially. (See Linsky 1975 for a good overview of this body of literature.) In particular, studies show that using first-class postage, particularly commemorative stamps, is especially effective in increasing (as much as 10 percent) the response rate (Hensley 1974; Champion and Sear 1969). Because a good response rate is important, the added expense of first-class postage on the outside mailing envelopes over bulk rate is justifiable. First-class mail has the added advantage of being forwarded by the post office. Hensley's research also shows the importance of including a return envelope different from the outside envelope; he also concluded that the least expensive choice, a business-reply-printed-return envelope, achieves the highest response rate when combined with a commemorative stamp on the outside envelope.

One study (Rossman and Astin 1974) indicates that nonprofit permits on the outer envelope combined with a follow-up mailing using first-class postage yields response rates only 2 percent to 3 percent less than the first-class postage on the initial mailing. Thus an institution should con ider using nonprofit permit postage on the outer envelope and first-class postage only for those envelopes returned undeliverable by the post office. There will probably be increased personnel time (and a slower overall response time) required to monitor the returned envelopes and address and send out new envelopes, but for many community colleges, extra staff time is more readily available than extra sources of funds.

Other mailing costs not shown in figure 6 are those required for either typing names and addresses of students on the envelopes or generating and affixing computer-printed name and address labels. These costs vary depending on the institution but should be included in cost estimates for the survey. At least one study—orpenter 1974-75) showed that personalizing the cover letter by manually



FIGURE 6

ESTIMATED COSTS OF MATERIALS FOR INITIAL MAIL OR PANDOUT CONTACT OF 1,000 STUDENTS

			.sī	TIMATED CO	STS*
MATERIALS	NUMBER**	EXPLANATION	First- Class Mail	Nonprofit Permit Mail	Handout
Questionnaires	1,000	Estimated at \$.10	\$100.00	\$100.00	\$100.00
Cover Letters	1,000	Printed on official stationery	16.60	16.60	16.60
Return Envelopes	1,000	Business reply return envelopes	16.80	16.80	
(Size No. 9)		(a) Printing costs (b) Postage sts at \$.15 each × 300 returned	45.00	45.00	
Mailing Envelopes (Size No. 10)	1,000	Standard business size	19.80	19.80	
First Class Postage	1,000	First class commentorative stamps at \$.15 each	150.00		
Nonprofit Permits	1,000	(a) Nonprofit permits at \$.027 each		27.00	
First Class Postage for Undeliverables		(b) Estimated 10 percent undeliverables at \$.15 each		15.00	
ТОТАІ			348.20	240 20	116.60
Per Student Contact Costs			\$ .35	\$ .24	\$ .12
Per Student Response Costs	(estimating 300 resp	ponses)	\$ 1,16	\$ .80	\$ .39

<sup>\*</sup>As of 1979.



<sup>\*\*</sup>Estimated costs for more or fewer than 1,000 students should be approximately proportional

typing names and addresses increased the response rate, though not significantly, over computer- or machine-produced names and addresses. Thus if all other factors are equal, typing students' names and addresses is preferred. But if the institution can produce the computer-generated labels at a substantial savings and is looking for ways to cut the cost of the survey, computer-produced labels are a reasonable alternative.

The other costs incurred in conducting a survey are primarily personnel costs. It is difficult to put dollar amounts on these costs because they will vary from institution to institution depending on salaries and time invested. The following potential personnel requirements, given without estimated costs, should be considered:

- Survey administrator
- Secretarial time for typing questionnaire and cover letter drafts and final copies
- Computer personnel time for creating survey sample lists and address labels (or clerical time if lists are created by hand, plus typist time for typing envelope names and addresses)
- Approximately 20 hours of clerical time for stuffing at. 1 mailing 1,000 questionnaires
- Clerical time for recording and tracking returned questionnaires
- Keypuncher time for punching responses
- Computer-data analyst time for analyzing returned questionnaires
- Report-writer's time
- Secretarial time for typing report

## Tracking Mailed-Out Questionnaires

If an SOIS questionnaire is to be mailed to students or former students, the institution needs to follow additional procedures to keep track of the survey. The initial mailing of questionnaires can begin as soon as the questionnaire, cover letter, envelopes, address labels, and a list (in the same order as the address labels or typed addressed envelopes) of each student's ID number and/or name, and address. This list can, and probably should, be the survey status list shown in figure 7.

After the initial mailing is completed, a set of tracking sheets should be prepared for recording the status of each questionnaire as it returns. Figure 8 shows a sample tracking sheet. If institutional records are computerized or if names and addresses of student: are keypu, thed to produce labels, these tracking sheets can be produced by the computer; otherwise they must be typed. The tracking sheet should contain:



1

## FIGURE 7

# Suggested Form for Listing of Sample and Survey Status

^			FIRST	MAHANG			SECOND MA	HJNG	
ID	NAME	ADDRESS	Undeliverable	Unusable	Urable	Date Sent	Undeliverable	Unusable	Usable



 ${\bf FIGURE~8}$   ${\bf Example~of~Listinc~of~Western~College~Sample~and~Survey~Status}$ 

			FIRST	MAILING			SECOND MA	ILING	
Ю	NAME	ADDRESS	Undeliverable		Usable	Date Sent	Undeliverable	Unusable	Usable
0122356	Axark Andrews	314 W. 8th Ave. Norfolk, VA 10823	2/9						
9262230	Alice Byers	Apt. 3B 9815 Maryland Ave. Los Angeles, CA 98122			2/15				
1135976	Robert Davis	213 E. 11th Street New York, NY 10220				2/29			
4399178	Susan Ford	91 Brand Drive Rockaway, NY 11691		2/11					
2123947	David Forris	123 Table Mesa Drive Boulder, CO 80303			2/11				





- 1. Student's ID number, name, and address
- 2. Blank columns for recording the *date* the following information is received:
  - a) Date returned by post office as undeliverable
  - b) Date unusable questionnaire returned or letter received; student ineligible or unable to respond (student improperly identified for sample, refuses to respond, deceased, and so forth)
  - c) Date usable questionnaire returned
- 3. Blank columns for recording second mailing information:
  - a) Date second set of materials sent
  - b) Date returned by post office as undeliverable
  - c) Date unusable questionnaire or letter received; student ineligible or unable to respond
  - d) Date usable questionnaire returned

Figure 9 shows a tracking sheet with examples of entries by the school.

As questionnaires are returned, one person should be in charge of recording this information for each student. Some kind of identifying mark (such as a check  $[\mbox{$\mbox{$\nu$}}]$ ) should be placed on each questionnaire as the proper information is recorded on the tracking sheers. To save all returned materials (even undeliverable questionnaires) until the end of the survey is a good practice.

#### FOLLOW-UP MAILING STRATEGIES

There is unequivocal evidence that follow-up activities do increase response rates in mail surveys (Etzel and Walker 1974; Hinrichs 1975; Wiseman 1973). There is also evidence that a cash reward increases the rate of return (Hackler and Bourgette 1973; Huck and Gleason 1974 Wiseman, 1973). A selected bibliography by Marshall and Gee (1975) and an article concerned with stimulating responses to mailed questionnaires by Linsky (1965) both provide up-to-date, in-depth information about techniques for maximizing response rates in surveys. Rather than review here various methods and their merits, several strategies appropriate for outcomes studies and consistent with recent research will be given for increasing response rates through follow-up activities.

The first follow-up strategy is to send out a complete duplicate set of materials rather than a simple follow-up letter or a postcard reminder. A study by Etzel and Walker (1974) found that a letter with duplicate questionnaire and return envelope materials did not increase the response rate over the follow-up letter without duplicates. However, a study by Rossman and Astin (1974) in which respondents were actually college students, indicates a significantly lower response rate when no duplicate materials were sent. It is recommended therefore that a duplicate set of materials be sent to those who do not return questionnaires.



FIGURE 9 Estimated Costs of Materials for Four Types of Follow-Up Mailings to 700 Students

		;		ESTIMATE	COSTS*				
			First Cla	ıss Maji	Nonprofit P	ermit Mail			
MATERIALS	NUMBER**	EXPLANATION	No Dime	Dime	No Dime	Dime			
Questionnaires	700	Estimated at \$.10	\$ 70.00	\$ 70.00	\$ 70.00	\$ 70.00			
Cover Letters	700	Printed on official stationery	11.60	11.60	11.60	11.60			
Return Envelopes	700	Business reply return envelopes	11.75	11.75	11.75	11.75			
·		(a) Printing costs (b) Postage costs at \$.15 each × 200 returned	30.00	30.00	30.00	30.00			
Mailing Envelopes (size No. 10)	200	Standard business size	13.85	13.85	13.85	13.85			
First Class Postage	700	First class, commemorative stamps at \$.15 each	105.00	105.00					
Nonprofit Permit	700	At \$.027 each			r 18.90	18.90			
Dime	700			70.00		70.00			
TOTAL.	1		\$242.20	\$312.20	\$156.10	\$226.10			
Per Student Contact	Costs		\$ .35	\$ .45	\$ .22	\$ .32			
Per Student Respons		ting 200 responses)	\$ 1.21	\$ 1.56	\$ .78	\$ 1.13			



<sup>\*</sup>As of 1979.

\*\*Costs in this figure based on an initial return of 300 questionnaires, leaving 700 for the second mailing.

The second is to send out a duplicate set of materials with a dime enclosed. Cash rewards (even as little as a dime) have been effective in increasing response rates beyond the increase due to a letter and questionnaire alone. (It has been suggested that a monetary reward tends to make respondents feel bad about accepting the money without giving anything in return.) If the extra expense of the dime can be borne by the institution, this method is preferable to the duplicate set of materials without the dime because it could bring a greater number of responses. It should be noted that the cash reward is recommended only for the follow-up mailing (not the initial mailing) because of evidence (Hackler and Bourgette 1973; Hick and Gleason 1974) that a monetary reward need only be given after the first mailout to those who are not responding to the questionnaire.

A telephone reminder is a third type of follow-up activity that is effective in increasing the rate of returned questionnaires. This is particularly appropriate for a community college, since it serves a finite geographical area where most students can be reached by a local call, even after leaving the school. If this condition is met and the institution has available staff to make the calls, the cost of this method is less than a second wave of questionnaires and almost certainly is more effective.

There are certainly many combinations of follow-up techniques possible. The follow-up variations suggested here were selected as most appropriate given research findings and budgetary considerations at most colleges. Staff at individuial institutions will have to decide which of the three main follow-up strategies (or some combination) given in the discussion above is best for them. The important point is to plan for and carry out some kind of follow-up activity.

#### CHECKLIST OF SURVEY-PLANNING AND ADMINISTRATION ACTIVITIES

The following activities are required to prepare for and conduct the student-outcomes surveys outlined in the *Handbooks* 

- 1. Decide on the objectives of the survey and the specific study questions to be answered.
- 2. Write out a plan and schedule for the entire survey.
- 3. Study the appropriate questionnaire to ensure that it will provide data appropriate for the survey objectives.
- 4. Meet with a committee of potential institutional users of the survey results to discuss the survey objectives, plan, schedule, and questionnaire.
- 5. Decide whether to survey all students in the population or a sample of a specified percentage.
- 6. Set up a method for identifying students in the population. It sampling is to be done, also set up a method for randomly selecting students from the population.



7.	Decide what method will be used to distribute questionnaires.
8.	If sample is selected and/or mail distribution is to be used,
	produce a typed or computer-printed list of all students to be
	surveyed. If using the computer, also generate a computer file
	of all students in the survey.
9.	Prepare survey materials (questionnaires, cover letters, follow-up
	materials, mailing envelopes, return envelopes, postage, address
	labels, tracking sheets).
10.	Prepare a set of follow-up procedures.
11.	Hand out or mail the questionnaires.
12.	As questionnaires are returned, record appropriate information
	on tracking sheets.
13.	Implement the follow-up plan to maximize response rate.
14.	Once the questionnaires are returned, implement coding and
	data processing procedures.
15.	Conduct the data analysis needed to answer the study questions.
16.	Develop the reports for disseminating the results of the study.



# Using the SOIS Questionraire-Analysis Service

One problem in conducting a student-outcomes study is the need to develop an analytic framework and computer software to facilitate analysis of the data collected. Thus the NCHEMS-College Board Student Outcomes Information Services (SOIS) includes procedures that will permit computer analyses of the student-outcomes questionnaires. The procedures provide an institution with a ready-made analysis package that contains frequency and percentage distributions for every item as well as appropriate means, medians, and standard deviations; cross-tabulations of most items showing differential responses for subgroups of respondents; comparative, summary data from questionnaires collected by other, similar institutions that have participated in SOIS; and, perhaps most importantly, quick turn-around for processing questionnaires. Specifically, SOIS can:

- Keypunch the questionnaires collected by the institution
- Perform computer analyses using the standard QUEST analysis system developed by the College Board
- Provide an easy-to-read, computer-generated report for each questionnaire, including statistical tables that can easily be inserted into locally produced interpretive reports

The SOIS procedures for analyzing the questionnaires give the institutional administrator a quick, inexpensive, and simple way of communicating student-outcomes information to the various campus and community audiences.



# How to Use the Questionnal re-Analysis Service

The SOIS questionnaire-analysis procedures are initiated after the local administrator has administered the questionnaires, collected the completed forms, and inspected them to ensure an acceptable level of accuracy and completeness. The procedures end when a computer-produced analytical report is mailed back to the institution, usually within two weeks.

In general, the institutional administrator should inspect at least a handful of the returned questionnaires to ensure that students have followed directions and that no inconsistencies have occurred in the kinds of responses received. In some instances, the administrator may discover problems that can be corrected through hand-coding a particular response before forwarding the questionnaire for analysis. In other instances, an inspection of the questionnaires before keypunching may reveal problems that can not be corrected but that can be discussed in the interpretive report.

The SOIS questionnaire-analysis procedures assume that all student responses have been made in a format that can be keypunched without further editing or coding. The standard questionnaires request that all responses be made in such formats. If local questions have been added, however, the administrator should verify that they have been correctly entered in the Additional Questions section of the questionnaire. Some local questions may require that students write in their responses. For these responses to be included in the computer analyses, the local administrator will need to code them in the appropriate box of the Additional Questions section of the form.

Any hand coding should be performed by a person who has been given explicit coding instructions. The coder should be told to set aside any questionnaire for which there is an ambiguous response, so that the survey administrator may decide how to code it.

After the completed questionnaires have been inspected and any coding performed, they should be securely bundled, together with a fully-completed Batch Transmittal Form, and to warded to the SOIS Director, College Board, 888 Seventh Avenue, New York, New York 10019.

A sample Batch Transmittal Form is shown in Figure 10. Each institution participating in SOIS will be provided with a copy of this form when its questionnaire order is filled. A separate Batch Transmittal Form must be submitted for every type of questionnaire (Entering-Student, Continuing-Student, and Former-Student) and for every administration of a questionnaire for which a separate analysis is desired.

For example, three separate Batch Transmittal Forms must be completed if an institution: has administered the Entering-Student Questionnaire to new students in the fall, winter, and spring quarters; is transmitting all three administration's questionnaires to the College Board at one time; and desires separate reports for each entering student group. Similarly, if the institution has administered the



Entering-Student, Former-Student, and Program-Completer/Graduating-Student questionnaires and is forwarding all three at one time, separate Batch Transmittal Forms must be completed. In addition, if more than one institution or more than one campus of a single institution is submitting questionnaires at one time, and if s. parate analyses are desired, separate Batch Transmittal Forms must be completed.

The Batch Transmittal Form requests the following information:

- Institutional Study Identification Number. This number is used to identify different institutions or different campuses for which both individual and group reports are to be prepared. If the questionnaires have been administered as part of a larger, prearranged group study, a special identification number will have been assigned to the institution by the study administrator. If the institution, on its own, is submitting questionnaires from more than one campus or administrative unit and wishes separate analyses, different numbers should be assigned to identify the different entities.
- Type of Questionnaire Administered. The individual questionnaires in the different series have different questions and thus require different analyses. The questionnaire identification number ensures that the correct analysis package is used for the type and series of questionnaires included in the batch. (Note again that separate Batch Transmittal Forms must be completed for each different kind of questionnaire submitted for processing and analysis.)
- Date Questionnaires Were Administered. This identifies the time of administration of the questionnaires. The date entered here will be printed on the computer analysis for identification purposes. Enter the date in the boxes for month, day, and year.
- Type and Control of Institution. Enter the code number that best describes the kind of institution at which the questionnaires have been collected. The code entered here will identify the group of previously participating institutions from which comparative data will be developed, together with the institutionally specific analyses.
- Carnegie Designation of Institutional Type. Enter the code number that best describes the kind of institution at which the questionnaires have been collected. The code entered here will be used for internal research purposes and for developing additional comparative data in subsequent years of the service.
- Location of Institution. Enter the Postal Service two-letter code identifying the state in which the institution is located. (For example, CA



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<sup>1.</sup> Comparative analyses are, of course, limited by the number of institutions that have previously participated in SOIS. For the initial years of the Service they will be limited to the iteneral public private, two-year/four-year/proprietary groupings. As participation expands, so, too, can the comparative analyses.

for California, NY for New York.) If the institution has campuses in more than one state, enter the code for the state in which the primary campus or administrative center is located. The code entered here will also be used for internal research purposes and for developing additional comparative data in subsequent years of the service.

1

- Approximate Number of Questionnaires in Batch. The number entered here will be compared with the number of questionnaires keypunched to ensure that none is lost in transit.
- Return of Questionnaires. Upon request, the College Board will return the questionnaires to the institution after keypunching and analysis. An additional charge for return postage will be included with the analysis costs.
- Submitted By. Provide the name, address, and telephone number of the person to whom questions about the desired analyses should be directed (if necessary) and to whom the computer-produced reports should be forwarded.

#### OUTPUTS OF THE ANALYSIS SERVICE

The standard output of the SOIS Questionnaire-Analysis Service is one copy of a computer-generated report for each group of questionnaires for which a Batch Transmittal Form is submitted. Each item in the standard questionnaire will be identified with appropriate textual statements. The number and percentage of students indicating each response will be identified. Means, medians, and standard deviations will be provided for questions with appropriate numerical response values.

Local questions coded in the Additional Questions section will be analyzed only as local question 1, local question 2, and so forth. Responses to the local questions will be identified only by the code number or letter entered in the response box. Frequency and percentage distributions will be provided, but no means, medians, or standard deviations will be calculated.

Special analyses and outputs can be provided upon request, with prior arrangement, and for additional cost. These include:

- Multiple copies of the computer-generated report, which typically can be produced less expensively at the time the initial report is prepared than through subsequent local reproduction.
- Group reports combining responses to the same questionnaire made by students at more than one institution or by more than one campus or administrative unit that administers the questionnaires at the same time. Multiple group reports can be prepared for different levels of inquiry (for a campus, a multicampus institution, a segment of similar institutions, a geographical region within a state, a state, or



#### FIGURE 10

#### QUESTIONNAIRE BATCH TRANSMITTAL FORM



# Questionnaire Batch Transmittal Form

Institutional Study Identification Number			
Type of Questionnaire Administered (Complete a vep.	orato care d	erneral to the present open of the control of	
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1.2 Research University II 1.3 Doctorate Cranting University I		Control Superate Health Instead of Ca-	
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Number of Questionnaires in this Batch			
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Mail completed Transmittal Form with SOIS Question	inaires to		
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- a multistate region). Special institutional coding may be required to produce meaningful group reports; specific prior arrangements with the Director of SOIS Processing at the College Board are advised.
- Computer-tape output can be provided in a variety of track/density formats. Such output can help an institution perform subsequent detailed or different analyses as local needs and interests dictate.

In addition to the special outputs and analyses in the preceding list, NCHEMS and the College Board can arrange other analytic services to meet specific institutional, segment, or state needs. Most needs, however, should be determined before the questionnaires are administered to students. Those interested in special services or analyses not included in this list should contact the SOIS director at either NCHEMS (I.O. Drawer P, Boulder, Colorado 80302) or the College Board (888 Seventh Avenue, New York, New York 10019).

FIGURE 11 Sample Table of Contents for SOIS Analysis

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| Table | Tabl
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#### SAMPLE INDEX FOR SOIS ANALYSIS

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#### Understanding the Computer Analyses

The computer analyses of the SOIS Questionnaire-Analysis Service have been designed to provide the basic core of information needed for preparing local interpretable reports. Generally self-et planatory and easily understood, they do not require that the user be sophisticated in research methods or data processing.

In the analyses, questions are identified by the same number/letter code that appears on the original questionnaire. A table of contents, organized in the same sequence as items in the original questionnaire, precedes each analysis. An index, arranged in alphabetical sequence by question content, follows the analysis and helps the user find specific questions among the voluminous output provided. Samples of the first pages of the table of contents and index from the Entering-Student Questionnaire are illustrated in Figures 11 and 12

In the computer analysis, most items appearing on the questionnaires are cross-tabulated by responses to other items. This permits differential de cription of subgroups of the total student population. Typically, every fem is cross-tabulated by the gender, marital status, handicapped status, racial/ethnic group membership, course load, and age of the respondent. Other special cross-tabulations are provided as appropriate for individual items. These are summarized in a Question Table and Cross-Tabulation Report that can be found in the computer-generated report immediately after the table of contents.



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FIGURE 13

# Sample Question Table for SOIS ASIALYSIS

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Note. ... for descriptions corresponding to numbered items

The Question Table illustrates how data from the original questionnaire were converted to the QUEST analysis system for processing. (For those who receive tape output, the Question Table corresponds to the record layout for the individual student records on the computer tape.) A sample Question Table is illustrated in figure 13.

- 1. QUESTION. This describes the location, identification, length, and number of possible responses for each item. Within that section,
  - a) NO. is the sequential number assigned to the question for processing. In the Cross-Tabulation Report, this number is used to identify items.
  - b) PRT# is a designation corresponding to the original item on the questionnaire. This number identifies the sequence in which items



are printed in the computer-generated output and the actual number that precedes that item in the output.

c) LOC, describe, the starting position of that item in the computertar e record.

d) LGTH, describes the number of positions occupied by that Fera in the computer-tape record.

e) R# indicates the number of possible responses to that item. In question 005 (handicapped status, for example, up to five different responses can be recorded to indicate students who have multiple handicaps.

2. RESPONSES. This describes coding internal to the QUEST system regarding processing items.

3. PRINT. This describes the manner in which the analysis of the item is printed (number only, percent only, summary only.)

4. COUNTERS. This describes the size of the item in terms of core storage.

5. CROSS-TAB REQUESTS. This shows the numbers of the cross-tabulations used against this item. For example, question No. 010 is analyzed using only cross-tabulation 03, while question 020 is analyzed with cross-tabulations 01, 02, 03, and 04. The method of constructing these cross-tabulations is described in the following section.

A sample Cross-Tabulation Report from the two-year college, Entering-Student Questionnaire is reproduced in figure 14. It shows the way in which the cross-tabulation columns were prepared, the headings that appear in the cross-tabulation, and the items on which the cross-tabulation was used. Users of the Analysis Procedures will find this recent helpful in understanding exactly which responses to specific questions were used in producing each cross-tabulation.

17-ALGORITHM. This indicates the way in which student responses were selected for inclusion under a cross-tabulation heading. In this example, the algorithm (001) indicates that the responses grouped in column 1 (headed MALES) were those who answered question 001 (gender) with a response of 01. Similarly, those whose responses are grouped in column 6 (headed HANDICAPPED) are those who responded to question 005 (do you have a physical handicap?) with responses 01, 02, 03, 04, or 05.

In some cases, student responses to two questions are used to sort the responses into cross-tabulation groups. In those instances, two algorithm statements will be connected in the Cross-Tabulation Report by the words AND or OR. AND is used when a student responded to both indicated questions with the desired response; OR, when a desired response to either question would result in increasion.



# FIGURE 14

# Sample Cross-Tabulation Report for SOIS Analysis

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Note: See text for descriptions corresponding to numbered items



- 2. HEADING. These are words that appear at the top of the individual columns in the cross-tabulations. In many cases, they abbreviate the original responses in the quertionnaires. The heading BROWN, for example, stands for the longer "Hispanic, Chicano, or Spanish-speaking American" response to the racial/ethnic-group membership question.
- 3. USED ON. This indicates the individual questions cross-tabulated by the algorithm shown. In this example, cross-tabulation 04 has been used on questions 020, 060, 100, 140, and 180.

A sample page of actual output from the Entering-Student Questionnaire is illustrated in figure 15. As indicated at the top of the page, the QUEST analysis will interject text to explicate material included in the tables when appropriate. The tables themselves include:

- 1. Identification numbers corresponding to the designation of the item on the original questionnaire and a prose description of the content of the item. In many instances, since the prose description does not exactly duplicate the original question, the user should refer to the questionnaire for the exact wording.
- 2. Response identification numbers and text for every valid response to the original item. As with the text for the question, that for the response may not exactly duplicate the original on the questionnaire.
- 3. TOT and PCT (total and percent) that provide the frequency of response to each item and the percentage of all responses which that number represents. In some instances, the total (121 in this example) will reflect the unduplicated number of respondents to the questionnaire. For those where multiple responses are allowed (see the explanation in the section on the question table), the number will reflect the number of individual responses to the question, a number that will probably exceed the number of individual respondents. In either case, the percentage reported will represent the relationship between the number of responses and the total reported at the end of the column.

The TOT and PCT columns appear only the first time that an item is analyzed. In subsequent analyses of that item using different cross-tabulations, the TOT and PCT columns are blank.

4. Cross-Tabulation Rows that report the number and percentage of respondents answering both questions (for the table and for the cross-tabulation) under consideration. For example, eight respondents who described themselves as WHITE also indicated that they had an academic goal involving an increase in knowledge and understanding. Those eight white students represented 17.8 percent of all students who identified that as one of their goals.



FIGURE 15

SAMPLE ITEMS IN THE SOIS ENTERING-STUDENT QUESTIONNAIRE

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01 TO INCREASE KNOWLEDGE AND UNDER STANDING		(5)		- a, 6		210		(16.7)		(58.7)				(37.3
02 TO OBTAIN A CEPTIFICATE OR DEGREE		9		100	2.2	78.6			4	14.3	1	36	2	7 1
OZ TO OBTAIN A CENTIFICATE ON DEGINET	_		•	:P.C		(ਓਰੇ ਰੇ)	`	· •		(5.7)		(25.0)		(3.9
03 TO COMPLETE COURSES NECESSARY TO	2				•	6.3	15	8 دُرُم.س.			. 1	6.3		
TRANSTER	9					(3.1)		(83.3)			,	(25 0) 11 B	15	88 2
04 TO COMPLETE HIGH SCHOOL REQUIRE			14,	66.7	?	11 8					2	(50.0)	. 3	129 4
MENTS				state abo		.6 3.			15	160 0		120 0	15	100 0
05 OTHER ACADEMIC GOALS									.,	(32 6)				(29 4
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7A ACADEMIC GOALS			,,,,,	DE# 23		TO 30		AGE ****** TO 50	51	 10 <i>6</i> 0	ov	ER 60		
			UH	DILTE E			٠,		.,		_			
OF TO INCHEASE KNOWLEDGE AND UNDER			27	60.6	3	67	12	26 /						
STANE NG				(n 1 d)	•	. 7)		128 6)	2	7 1	1	36		
02 TO OBTAIN A CERTIFICATE OR DEGREE			•ĵ	(10.	18	64 3 (46 2)		59	-	(100.0)	•	(100.0)		

Note: See text for descriptions corresponding to numbered items.



In many cases, adjacent cross-tabulation columns are not mutually exclusive (as between the OTHER ethnic background and the FULL TIME class load). In those cases, the calculation of percentage begins again with the first column of the new grouping. These new beginnings are identified in the Cross-Tabulation Report by the word START in the column in which the count begins again.

5. Cross-Tabulation Columns that are reflected by the percentages in parentheses (XX.X). These show the percentage that the proportion of students in that row represents of all students in the column. For example, the eight white students who said they had as a goal the increase of knowledge and understanding represented 32.0 percent of all white students responding to that question.

Appendix 4 of the *Handbook* contains samples of some of the kinds of interpretive reports that institutions can prepare from the computer-generated reports of the SOIS Questionnaire-Analysis Service. Institutions should feel free to adapt and use those sample reports in preparing do aments for local use. In addition, the staff of NCHEMS and the College Board (or consultants identified by them), can help prepare detailed interpretive reports to meet local needs.



# Coding, Processing, and Analyzing the Data

Many colleges and universities have sufficient access to computer facilities and software so that they can themselves process and analyze the SOIS questionnaires. This chapter provides guidelines for each step in this process and suggests ways of computer editing responses, matching keypunched questionnaires to computer master files, and using standardized statistical/data computer software.

#### HAND CODING AND INSPECTING RETURNED QUESTIONNAIRES

To ensure that students have followed directions and that no inconsistencies nave occurred in the kinds of responses received for each questionnaire, a few returned questionnaires should be examined. This is especially important if local questions have been added to the questionnaires. If they have been added, they should be hand coded before keypunching so that responses to them can be tabulated along with responses to other questions.

All hand coding should be performed by a person who has received explicit coding instructions. The coder should be told to set aside all questionnaires for which there are ambiguous responses so that the survey director can interpret them.

#### Keypunching

Keypunch-location numbers have been assigned to each item in the SOIS questionnaires. In assigning these location numbers, it has been assumed that the user can



keypunch the questionnaire item in a continuous mode (that is, keypunch the location numbers 1 through 169) either on a computer tape or disc.

If the system available to the user has no such capability, keypunch instructions can be developed for keypunching in the questionnaires using 80-column computer cards. Because of the number of items in each of the SOIS questionnaires, three 80-column cards will nave to be used for each returned questionnaire. To help users develop these instructions, lists of keypunch locations on 80-column cards have been developed for each SOIS questionnaire. These lists are presented in appendix 5.

Regardless of what keypunch procedure is selected, cards should be verified by a keypuncher. Verification will nearly double keypunching costs, but will eliminate many errors. The keypuncher also should be instructed to consult the survey administrator about any ambiguous responses.

#### COMPUTER EDITING

In any questionnaire survey, mistakes by hand coders, keypunchers, or students who misread directions are bound to occur in recording responses. Editing using the computer can detect two basic kinds of errors:

- 1. Responses may be out of acceptable ranges for an item. For example, one of two students may be shown to have sex codes of "3" when only "0" and "1" are valid responses. This type of error can be detected by inspecting a preliminary frequency distribution of all responses to the questionnaire for all students, using a packaged program such as the Statistical Package for the Social Sciences (SPSS). Alternatively, a special computer program can be written that checks for out-of-range responses to each item for each questionnaire and prints a message when an error is found. To correct errors, both the original questionmaire and the matching keypunch card must be located, and the appropriate keypunch-card columns must be changed.
- 2. Contradictory responses may exist among pairs or sets of responses. An example of such a contradiction occurs when a sophomore student indicates that the *current* degree being pursued is a doctorate. These types of errors can be detected only by a special program that compares pairs or sets of responses for each student and writes an error message when inconsistent or contradictory data appear. To correct them, the keypunched cards must be changed after checking the correct responses on the original questionnaire. In many cases, these errors originate on the questionnaire (that is, a student misunderstood an item). In such cases, the survey administrator must decide which response is correct; those responses that contradict must be changed to "blanks" or "no response" on the appropriate card columns.



To facilitate these kinds of editing, it is important to keep the original questionnaires sorted in the same order as the keypunch cards. By keeping the questionnaires sorted, it will always be easy to find quickly a particular questionnaire needed for editing verification or any other purpose.

### MATCHING QUESTIONNAIRE DATA TO MASTER-FILE DATA

An institution may wish to match its computerized master file of student information with questionnaire information; a computer program can be written to accomplish this. Both files must be sorted in the same order and all information common to each file should be matched. That is, if student ID, age code, and sex code are on the master file (as well as on the questionnaire), then all duplicate information should agree before a match of the two records is considered correct. By using additional pieces of information to match records, the possibility of matching errors caused by incorrectly punched ID numbers will be minimized. Where ID numbers do not match, the original questionnaire can be reviewed and the keypuncit cards corrected. The resulting matched information can be stored on tape or disk as one record for each respondent.

For certain purposes, primarily related to checking response bias, the institution may also want to create a new master file containing codes for identifying the status of all students in the survey sample. The kinds of information that might be desired are:

CODE NUMBER	STUDENT STATUS IN SURVEY
(1)	Usable questionnaire returned
(2)	Student excluded from sample because of improper or
• •	foreign permanent address
(3)	Student deceased
(4)	Questionnaire returned by post office as undeliverable mail
(5)	No questionnaire returned
(6)	Unusable questionnaire returned

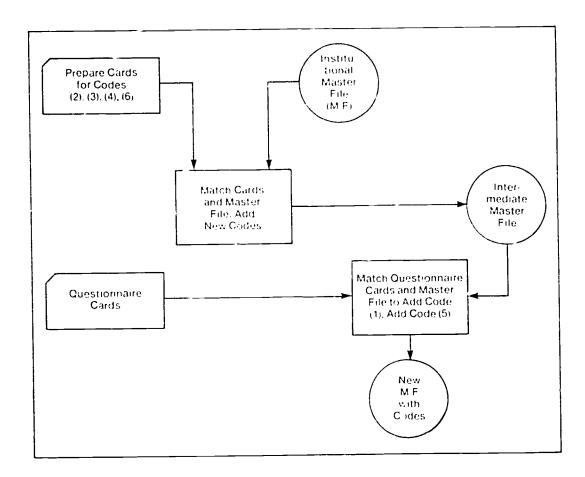
These codes can be added to the master file by keypunching a card for each student that contains the student's ID number and the appropriate code (that is, code 2, 3, 4, or 6) and matching these cards against the master file. Code 1 (usable questionnaire returned) can be added to the master file by matching the questionnaire cards against the master file. Code 5 is then defined as all master-file records that do not have a code. Figure 16 illustrates this procedure.

The analyst can now use the new master file with codes to describe similarities and differences among various coded groups. In particular, it is often useful for assessing response bias to compare master-file information between respondents and those who have not returned the questionnaires.



FIGURE 16

# FLOWCHART OF STEPS REQUIRED TO IDENTIFY STATUS OF ALL STUDENTS IN SURVEY



#### PACKAGED COMPUTER PROGRAMS

Student-outcomes surveys need packaged computer programs for two main functions. One is for manipulating data and selecting subsamples; the other is for analyzing data. Two commercially available packaged computer-program systems perform both functions: OSIRIS III: An Integrated Collection of Computer Programs for the Management and Analysis of Social Services Data (1973) and SPSS: Statistical Package for the Social Sciences (1975). A third packaged program, BMD, Biomedical Computer Programs (1973), has certain limitations in performing data manipulation and subsample selection but also can be used.

#### PERFORMING DATA ANALYSES

The data-analysis phase of almost any survey consists of descriptive statistics (frequencies, percentages, means, standard deviations) that summarize the questionnaire responses and as much additional attistical analysis as time, money, and



#### FIGURE 17

#### Sample Tabulation for a Questionnaire Fem Requiring a Single Response

N	o*,	
2	0.6	0. American Indian or Alaskan Native
5	1.5	1. Asian, Pacific Islander, or Filipino
51	15.0	2. Black or Afro-American
13	3.8	3. Hispanic, Chicano, or Spanish-speaking American
270	79.2	4. White or Caucasian
		5. Other
341	100.0*	тотан.
10	missin	g or unusable responses (2.8%)

Note: As in the case above, the percentages for each response category may not total ecostly 100.0 percent. The usual procedure for this is to record 100.0 as the TOTAL percent, and with an asterisk and corresponding footnote indicate that the individual percentages may not total 100 percent because of founding.

interest permit. In addition to basic questionnaire analyses, the data-analysis phase often includes an assessment of the degree of response bias that may exist in the group of students who chose to respond to the questionnaire (if respondents can be compared to the rest of the sample who chose not to respond). This section on data analysis therefore presents guidelines for performing basic descriptive statistical analyses of the questionnaire and assessing response bias. Also included is a brief discussion of potential analyses that go beyond the descriptive stage.

A. Basic Descriptive Analyses. Basic descriptive analyses of the returned SOIS Student-Outcomes Questionnaires usually consist of frequencies (counts) and percentages of the number of students who responded to each option of each question. Percentages for each questionnaire item are calculated using the total number of perunts who actually respond to the item as the denominator or base of the percentage equation. (Those who left an item blank are excluded from the denominator.) Thus each item is tabulated similarly to the example given in Figure 17.

For questionnaire items that direct the respondent to circle all the item options that apply, frequencies and percentages can be tabulated for each option. In this case, however, frequencies and percentages for each item option should not be summed since each option represents a dichotomous variable. Figure 18 illustrates the descriptive analysis for such a questionnaire item. For questionnaire items that have an underlying scale, it is appropriate to calculate the mean, standard deviation, and median response. Examples of such items include number of months



53

#### FIGURE 18

# Sample Tabulation for Questionnaire Item that Altows for Multiple Responses

	Goals Important to Recent Alumni When They Attended This College (Total $N=351$ )									
	N	00	Academic Goals							
	5 36	95.7	To increase my knowledge and understanding in an academic field							
	3.21	01 1	To obtain a certificate or degree							
	87	21.7	To complete courses necessary to transfer to another educational institution							
	1:	3.1	Other							
	N	ď,	Career-Preparation Goals							
	317	43	Poldiscovice career interests							
	207	58,9	To formulate long-term career plans and or goals							
Ì	212	60.1	To prepare for a new career							
1	85	24.2	Other							

since withdrawal, number of hours employed per week, and number of changes of major. In addition, for rating scales (such as extent of satisfaction with how the college prepared students for additional college work or for their first job), means and standard deviations can be calculated.

All these basic descriptive analyses can be performed for the total sample of respondents as well as for various subgroups of the sample. Subgroups that are frequently of interest are:

- Males and females
- Racial/ethnic groups
- Handicapped and nonhandicapped
- Age ranges
- Students' academic award goal—degree, certificate, or neither
- Degree types for graduate students
- Full-time and part-time students
- Employed and unemployed students
- Major or area of study
- B. Other Data Analyses. Numerous analytical directions for using the questionnaire data can be pursued beyond the basic descriptive analyses suggested here. These include cross-tabulating items, correlating items to investigate relationships among variables, building predictive models (perhaps using multiple-regression techniques), and testing hypotheses. These analyses will not be discussed here



because they generally require considerable training in statistics and data analysis that is beyond the scope of the *Handbook*.

C. Assessing Response Bias. Response bias exists when the students who choose to respond to a questionnaire survey differ systematically from the total sample of students who were sent questionnaires. Generally response bias operates so that actual respondents tend to be more concerned, more interested, or more enthusiastic than those who choose not to respond to a survey. Respondents also may have stronger views and may have more positive feelings in general than those who do not respond.

There are two general approaches in survey research to the problem of assessing response bias. One is to isolate a small random sample of those who do not respond to the survey and try to get valid, returned questionnaires for comparison with those who originally returned questionnaires. Primarily for cost reasons, this approach usually is not feasible in any but the largest surveys. Another approach, which can easily be done in a small survey, is to examine the characteristics of respondents and nonrespondents using demographic/background data available in the institutional master file records. Though this approach is technically less valid, it can produce useful insights into the response-bias question. Typically institutions have in their records such information as:

- Gender
- Race/ethnic category
- Home state
- Age
- Degree sought
- · Major field
- Grade-point average
- Number of terms encolled
- Date of withdrawal (if appropriate)
- Date of graduation or program completion, (if appropriate) which can be relevant in assessing possible response bias

Assessing differences between respondents and nonrespondents for these types of characteristics can be made by comparing per entages and means for the two groups. For example, 56 percent of the respondents are women, 49 percent of the nonrespondents are women, and the average age is 19 for respondents and 22 for nonrespondents. In many cases, the differences may be negligible between the two groups, indicating little response bias at least in terms of the characteristics on which the students were compared. In some cases there will be moderate to substantial differences between respondents and nonrespondents. The important point in investigating the response bias question is to document any comparisons between the two groups and to cautiously interpret questionnaire results to the extent that it is believed respondents may represent a biased group.



# Using the Survey Results

Using the information is perhaps the most important element in conducting any survey. Unfortunately it is common for institutions to collect survey data but never publish a report or otherwise attempt to disseminate the survey results. Not only is this consequence a waste of valuable time and money, but it also contributes to understandable reductance on the parts of students and others involved toward the whole activity of conducting surveys. The survey coordinator must therefore disseminate the survey results to all levels of potential users (from students to college presidents), not only to ensure that the data at least bave the potential to be used, but also to encourage positive attitudes about the value of student-outcomes it formation.

#### IDENTIFYING THE USERS

If the interpretation of any survey instrument is to be meaningful, it is important to identify the key users of the data and the levels of data use. When an institutional advisory committee is established in the survey-planning stages, this activity will have been completed. The kinds of questions and issues raised by the advisory committee should provide an outline of critical issues that must be addressed in the survey report. Even when there is no institutional advisory committee, there may be documents or records of conversations outlining the concerns of those who suggested that the study be pursued. In the absence of either kind of a priori records, the survey research can list the titles of various potential users on one side of a page and on the other, the possible uses of the survey information by each.



### WHAT KINDS OF REPORTS SHOULD BE PROVIDED?

Not only will different users want to answer different questions from the survey results, some may need different kinds of reports. The president or chairman of the board, for example, may want nothing more than a two or three-page executive summary that highlights the implications of the findings concerning major policy issues and alternatives. The director of institutional research, on the other hand, may be concerned with detailed statistics on every questionnaire item. The director of admissions may be interested only in how students learn about the college, so that recruiting activities can be tailored. The director of the graduate placement center may be concerned only about the kind of work students plan to do.

The survey administrator may write a series of reports. Some may be issued immediately after the survey is conducted; others may be distributed over a period of time. Many writers of research reports have found that several small reports, each dealing in some depth with a particular issue or item, are more easily read and understood than is a large report covering all aspects of the study.

Deciding what specific pieces of information may be useful to a particular decisionmaker is not an easy task. A good place to start is by determining the major responsibilities of all potential users and then gearing the information to fit their particular responsibilities within the organization. It generally would not be appropriate initially to give a college president detailed information related to each department within the institution. It would be appropriate to develop a report for the president that would give general indicators related to the success and/or failure of the institution. The academic dean, on the other hand, might be interested in departmental breakouts but would want the data summarized and arrayed so that comparisons between departments were readily apparent. Finally, the department heads may not be concerned with indicators that relate to the entire institution but rather with indicators relating specifically to the department, including some notion of how their departments compare within the institution.

Providing a truly useful report takes time and experience. The person preparing the report should solicit from the users feedback about the information that was particularly useful in the prepared report. This feedback can be used to modify and improve future reports. It also may be helpful to ask users what they specifically want from the report, before beginning to write. Frequently, however, this process can be frustrating to both the user and the report writer because it is difficult to identify ahead of time specific needs from the report when one is not familiar with the data.

Appendix 4, Sample Reports from Student Outcomes Assessment Surveys, provides four examples of reports that can be used as models for survey reports. The first two reports are examples of executive summaries; the third, an example of a report prepared to deal with a specific problem. The final report is an example of an actual research report summarizing the results of a former-student study.



#### Making Decisions Based on Information

It is important that users not only receive information that is disp' yed in a meaning-ful manner, but that they also use the information to effect positive change, within the institution. For example, suppose a Dean of Students believed that, it teems of students' needs, counselors spent too much time with students' personal problems and too little time with career counseling. A survey of students might indicate that many students were not aware of the career-counseling services but would use them if available, while relatively few students felt a need for and planned to use the personal-counseling services. Staffing information might collaborate this by indicating considerably more time spent in personal counseling than career counseling (perhaps because personal counseling takes more time per student served). These two pieces of data combined may then be enough motivation for the dean to take the initiative in effecting a change in the counseling program at the institution.

Sometimes financial distress coupled with new inform in causes change within an institution. At one small private college, an entire sturnat-major program was phased out because it was discovered that only a handful of students were being graduated from the program. The faculty in that program, when presented with the information about financial distress and declining number of graduates, recommended that the program be phased out and the department only be maintained as a service department.

Not every survey will cause with spread change. Students' questionnaire responses may only be the first piece of information in an area that may, in the future, need to be changed; or students' responses may, in many case, document a high satisfaction with the status quo.

#### FEEDBACK TO RESPONDENTS

One reinforcing technique that can encourage improved future participation in questionnaire surveys is showing respondents how the results are used. (Providing student feedback is particularly easy with on-campus questionnair is, such as entering and continuing-student surveys.) Most students will be interested in general survey results as well as any changes in college or university policies or practices resulting from the survey. Feedback is especially important for graduating seniors and alumni since one of the objectives of contacting them is to maintain their is terest and encourage their support of the college. If alumni and those who complete programs feel that their responses are influencing changes, they are more likely to become more involved in the institution. The same result is likely with on-campus does occur, it is especially important to report it to the group who helped bring it about. And even when there are no changes resulting from a survey, it still is important to inform respondents of the general survey results.

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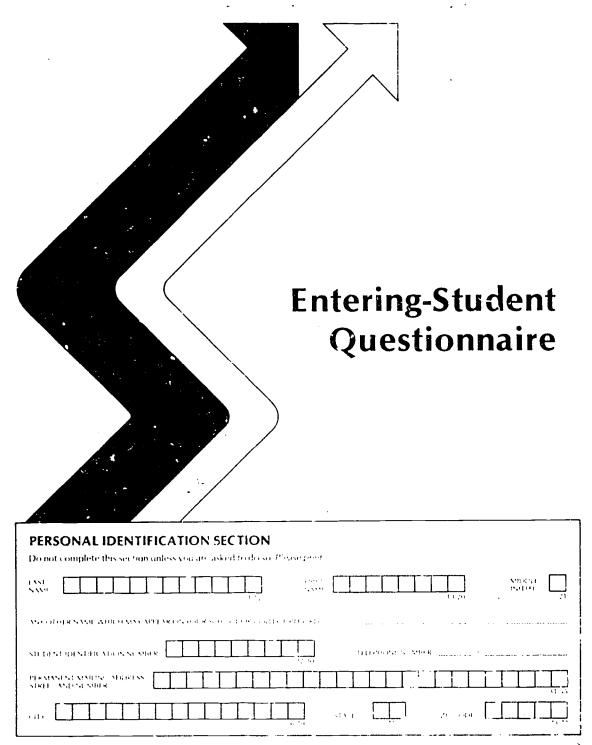
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## APPENDIX 1

The Two-Year Colleges
Questionnaires



National Center for Higher Education Management Systems The College Board







### INSTRUCTIONS:

Specific directions are given for completing many of the questions in this questionnaire. Where no directions are given, please circle the number or letter of the most appropriate response, such as in the sample question below

Sample

4. Are you currently married?



If you are not corrently married, you would contain the number 1

- 1. What is your sest
- s. ... ii fem io 1 Male
- 2. How do you describe your street is a con-
  - 200 American Indian of Michon Scitico
    - L. Asian Poolin 12 in terres 4.766 (c.
  - 2. Black of Atro American
  - A Hispania. Chica to come an despe de tig American
    - and Asiate of Caucastan.
    - , Other
- Cottox old are you?
  - $0.15, \, m_{\rm B}^2 \pm 18$
  - 1 10 5 22 amos
  - Contract Contracts
- La Properties Control
  - and address of a
  - All to Street as
  - en all to budge the
  - find volume more
- 4. No vesses arrently mattered?
  - i de , ∾o
- 5. Dong Green, and the Bayer's promised the first Consensate Pacapphs
  - ( No.
- 7.1 Yes restricted metallic
- and the mistricted being no
- A training tend to the con-
- $\mathcal{L}_{\mathrm{tot}}$  , the subset function of the constant of  $\Omega$  , where
  - Section 6

- 6. a. Have you previously enrolled in any postsecondary educational insutution( It you have enrolled in more than one please circle the most recent
  - 40. So. I have not been previously enrolled.
  - 1 Yes at this institution.
  - 5. 2. Yes cospublic two year cost sign
  - 3. Yes, at a public tour year college or university
  - (=) 4. Yes, at a private college or diagersity
    - 5. Yes, at a vocational/technical school, hospital school of masing, trade school, or business subsol
    - -cotter
  - East you have attended another college, please write in the name of the one you most recently attended
- 7. The rollowing statements reflect the goals of many college students. Please circle the letters of all those goals that are important to you.

### Academic Go 18

- A. Forinctease my knowledge and understanding in an academic field
- B. To obtain a constituate or degree
- C. To complete cours is necessary to transfer to 111 another educational institution.
- D Other

### Carer: Preparation Coals

- L. To discover my someon a terroity.
- 1. Tectormal, actional term, larger plans of diorigilluls
- C. To prepare teals new states?
- t. Other

pole of Caraca Improvement couls.

- to leaving receiving kirostedigent chine, tokulis, and o compensation residents. However, and concarred
- is following comes bancos on as use and or permetion
- 1.199.3

second land to little different courties. County

- It is not constructed to seeke day student life and campa acreaties
  - At 1 cars reaso my professionami, actuall and a progenit
  - S. Top cet per ple
  - . . . . . . . . .
  - the conditions becomes the Chiminimises of
    - the form test of the left confedence.
    - Committee on the state skills.
- complete my control of the about the second
  - To be on Anti-than will even transition. See or As a result of the complete the follow.
  - so the convenience and its to be more problem
  - get a contrained adaptable

8.	From the list of goals in question 7, please select the
	three that are most important to you and enter their
	codes below. For example, if your most important goal
	is "To obtain a certificate or degree" enter the letter B
	in the first box

Most Important	Second Most Important	Ihird Most Important
210	117	117

### 9. What degree are you currently working toward at our college, and what is the highest degree you ultimately plan to each? Circle a number in each column

i unent	Littimate	
. ,•	r ()	Not seeking a certificate or
i	1	degree
i i	1	Certificate of one year or bos.
1.2	111.1 2	Certificate of mess than
7	111	one year
1		Associate degree
	1 4	Bachelor's degree
- 5	15	Graduate or professional
		destroe

10. a Please write or cour intended major or area of study at our college

### b Isos Took at List A: Majors and Areas of Study and enier in the hoxes below the code number of the category in which your major or area of study falls.



## 11. What is your intended enrollment status?

- =0. Primarily for credit -- full-time (12 or more hours each term enrolled).
- 11 4 1. Primarily for could part-time (less than 12 hours each term entolled)
  - Primarily not for credit



### 42. What will your primary employment or occupation status be during four first term at our college? Oncle the most appropriate response

- (C) Employed more than half time
- Employed half time or less
- 2.20— 2. Homemaker, not employed outside of the frame.
  - 3. Not employed but would like to work.
  - 4. Not employed and do not care to work while attending college

### 13. The decision to attend a particular college is usually influenced by a variety of factors. Please circle all of the factors that influenced your choice to attend our college.

- 171 A. Academic reputation of our college
  - B. Course offenings
- C. Former student's advice . . .
- the Distensifiers or triends advise
- ٠. . 4. Counselors advice
  - 3. Employer's suggestion.
- c. Will help me retein my current employment
- 4. Acadability of financial aid . .,
- . .. 1 Institution's social reputation
- Clase to home
- 1. Wanted a change in scenery or location
- At Range and availability of student services
- 1. Lean identity with fellow students
- O Inconvenient to go elsewhere
- 1' Other \_\_\_\_\_.

### 14. How did you learn about our college? Please circle all items that apply

- 1 17 0 From people at my high school
- I From relatives triends or acquaintances 1 (8
- 2. From a representative of this college: 1 10
- 3. From a college placement service or some other (44) education on term attentise re-
- 4. From a college catalog. 1 11
  - 5. From material Lieuceived in the mail.
- b. From material fread in a newspaper or magazine 14
  - 7. From a raico or 1V advertisement
- 8. From an information display at an education fair shopping center county tair or similar location.
- 9 Other

- 15 a Was entabling export first choice?
  - $\epsilon = \epsilon \frac{0.3\,\mathrm{es}}{1.5\,\mathrm{co}}$

### or It no will kind of college was your first choice?

- to Apoblic two year college.
- 1. A public tout to 2 college or aniverses
- 2. A private college or university
- 2.3. A vocational technical school, hospital school of nursing trade school or business school.

### 4 Other

What was the name of the conege that was your tost changet

# 16. Dicyou planto apply for financial aid at our college?

- in Yes. Those already applied.
- or on Yes Uplan tecapply
  - 2. No. 1 do not trank I will ever apply



17. When would you most preter to take your classes?  Circle one  0. Weekday mornings 1. Weekday atternoons 2. Weekday exenings 3. Anytime during the weekend 4. Anytime during the weekend 5. No preterence	18 Do you plan to enroll at our college next term?  O Yes  1 No Excil complete my program this term 2 No but I plan to return at some future date  O I plan to transfer to another college  4 No I have next ansitor additional eduction if this time 7 I do not yet show my plans for next term
ADDITIONAL QUESTIONS SECTION	
Additional questions may have been added to the printed questions, please use the hoses below to record your tests.	form to your coolege. It <b>you have been asked to answer</b> additional mass.
19 20 21 22 21 24 25 152 153 154 155 156 156 157	26 27 28 29 30 31 32 33 The translation to 2 163 164 the 766

Please use the space below for any commercis  $\cos a$  have about our college, this questionnairy or anything else you care to share with c

. .

espression (Comment) No Comment (Comment)

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## LIST A: MAJORS AND AREAS OF STUDY

## Programs usually requiring four or more years of study

0100	Agriculture and Natural Resources
0200	Architecture and Environmental Design
0300	Area Studies (includes Asian Studies, Black Studies, etc.)
0400	Biological and Life Sciences
0500	Business and Management
0600	Companications
0700	Computer and Information Sciences
0800	Education
0900	Engineering
1000	Tine and Applied Mrts (includes Art. Dance, Drama, Music, etc.)
1100	Loreign Languages
1200	Hoalth Professions
1300	Home Leonomics (includes C) thing in Trestiles, Institutional
	Housekeeping, and Food Service Management, etc.)
1400	Law
1500	Letters (includes Creative Writing, Literature, Philosophy,
•	Speech, etc.)
1600	1 brary Science
1700	Mathematics
1800	Military Sciences
1900	Physical Sciences ancludes Chemistry, Physics Larth
i	Sciences, etc. 1997
2000	Psychology
2100	Public Attaus in 4 Social Services
2200	Social Sciences includes Anthropology, Economics
	History Fontical Science, Sociology, etc.)
2300	Theology and Religion
4900	Interdisciplinary Studies
бож	Other
7000	Undecided but probably program of tour or more years

# Programs usually requiring less than four years of study

5(XX)	Business and Commerce Technologies and ludes Accounting
	Banking, Commercial Art. Hotel and Restaurant Management
	etc)
5005	Secretarial Technologies (includes Office Supervising and
	Management Stenographic and Lyping Lei boology, etc.)
5006	Personal Service Technologies fineludes Stewardess Training
	Cosmetologist, etc.)
5100	Data Processing Technologies (includes Computer
	Programming, Keypunching, etc.)
5200	Health Services and Paramedical Tecal ologies and ludes
_	Dental and Medical Assistant Technology (PN Occupational
	and Physical Therapy Technology (1)
5300	Mechanical and Engineering Lechnolog, is includes
	Aeronautical and Automotive Technology Welding
	Electronics Architectural Drafting etc.:
5317	Construction and Building Le. Landogies (include - Carpentry
	Plumbing Sheet Metal Heating (etc.)
5400	Natural Science Lechnologies (includes Agriculture Lechnology
	Environmental Health Technology, Forestry and Wildlife
	Technology, etc.)
5404	Food services Lechnologies (includes Lood Service
	Supervising Institutional Food Preparation, etc.1
5500	Public Service Lectinologies (includes Law Entore (ment
	Technology, Teacher Aid Training Fire Control Technology
	Public Administration Technology, etc.
5506	Recreation and Social Work Related Technologies
8000	Other
(KK)	Undecided but prof ably less than four your program

Note. On the actual SOIS Questionnaires,  $1.18 \, \Gamma \, A$  is printed on a panel extending from page 2. Because it is idential in all questionnaires, it is reprinted in this appendix only once.



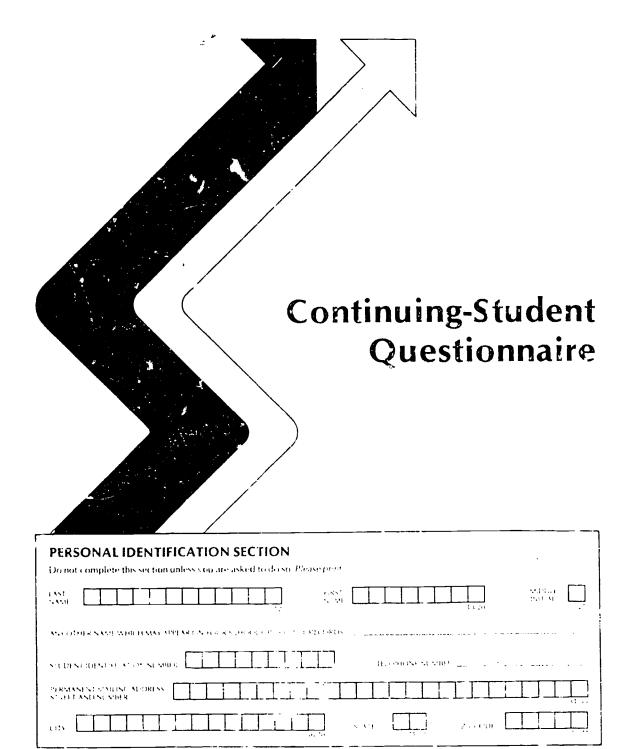
### LIST B: OCCUPATIONAL TITLES

- 01. Agricultural and Forestry Occupations, Eishers, and Hunters
- 02 Clerical Occupations
- 03 Construction, Drilling, and Mining Occupations
- 04 Executive, Administrative, and Managerial Occupations
- 06 Health-Diagnosing and Treating Practitioners
- 07 Health Technologists and Lechnicians
- 08 Marketing and Sales Occupations
- 09 Material Handlers, Equipment Cleaners, and Laboren
- 10. Mechanics and Repairers
- 11 Military Occupations
- 12. Nutural Scientists and Mathematicians
- 13 Nurs is, Pharmacists, Dietitians, Therapists, and Physicians' A sistants
- 14 Production Occupations (Occupations concerned with setting up, operating, or tending of machines and with hand production, usually in a factory or shop)
- 15 Service Occupations
- 16 Social Scientists, Social W**orkers, Religio**us Workers, and Lawyers
- 17 Teachers, cibrarians, and Counselors:
- 18 Technologists and Technicians (except Health)
- 19 Transportation and Material-Moving Occupations
- 20 Writers, Artists, Editors, and Athletes
- 21 Other



Note LIST B, printed on the backside of the panel, he long LIST A, is included only with the Recent Alumni Question-dairy, in all other questionizaries this panel is blank.





National Center for Higher Coccation Management Systems The College Board







### INSTRUCTIONS.

Specific directions are given for completing many of the questions in this questions are. Where each restricts are given please circle the number or other of the most repropriate response such as in the sun plequestion tellow

Sample

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If you are not a grently morror by sew such about the

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- 2. The tellewing statements reflect the goals of many college. students. In the first column, perise circle the lefters of the ac $x \rightarrow s$  that are important to you at this time. In the second and a circle the letters of those goals that was teel accorare not as instinct have achieved

Hose goals are important to me at this time.

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	į		Ļ	Neademic Goals
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				understanding in an academic field
144	В	92	8	To obtain a certaicate or degree
14.	(	- 4	(	To complete courses not essars to transfer.
				to another educational institution
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				Career Propagation Coals

stateer Preparation Corals	
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1 5 or Career Improvement Coals

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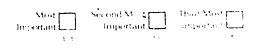
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8. From the list of goals in question 7, piecese select the there that are most in portant to you at the time and oner their codes below. For example, it your most important goal is. To obtain a certificate or degree enter the letter B in the first box.



9. What degree are year currently weeking toward at our college, and what is the highest digrees you ultimately plan to each Carde a number of such consists.

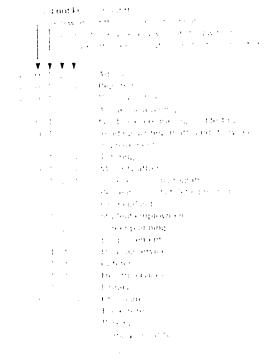
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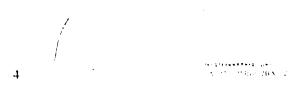
- 13. When would you prefer to take your classes?
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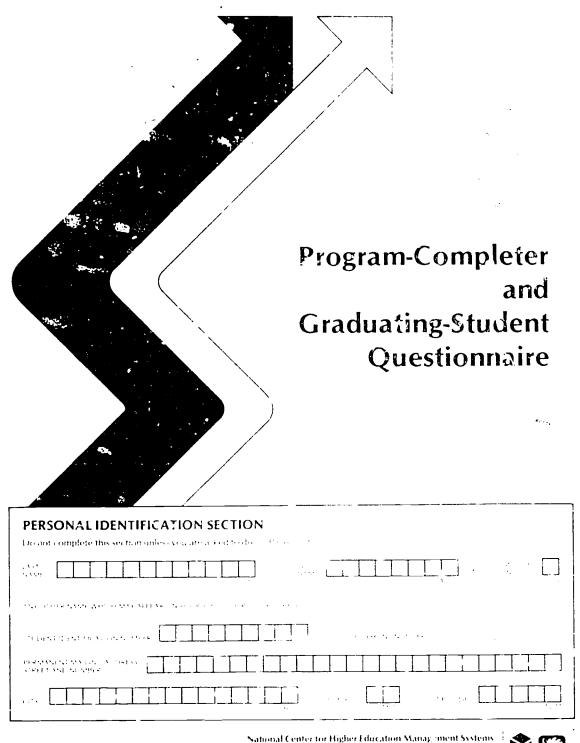
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National Center for Higher Education Management Systems the College Board







### INSTRUCTIONS:

Specific directions are given for completing man, of the questions in this question naire. Where no directors are given, please circle the number or letter of the most appropriate response such as in the same. question below

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- 5. De you feel the you have a remove the Circle all that apply
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 1. Following statements reflect the goals of many colling is so next of the first column please cache the effects of to assigna's that are important to you at this time. In this the soft column, circle the letters of those years and to and a streaching inger have achieved

these good care important to me at this time.

The segoals Lam achieving or have achieve di-

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B. To obtain a conduction degree 93 C

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8 Ar ... whist of goals in question 2 please select the three that are most Important to you at this time and enter their codes below. For example, it your most important goal is. To obtain a certificate or degree. enter the letter B in the first cox

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17 a Do you currently have plane for additional education?

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16 2. Yes 1 have alreg dy enrolled at another college.

4 Yes I plan to coroll at mother college 4 conscurrent's under red about any additional education

20 It you circled response 2 or 3 ple se were notice name of the college very pain courtent.

18. Di you plan to continue your education, what is the highest degrees—ultimately plan to earn?

2. O Ceraticate

1. Associate degree

2. Bachelor's degree

3. Master's degree

4. Specialist degree(e.g., Ed.S.)

5. Protest anal degree(e.g., Ph.D., Ed.D., D.B. s.)

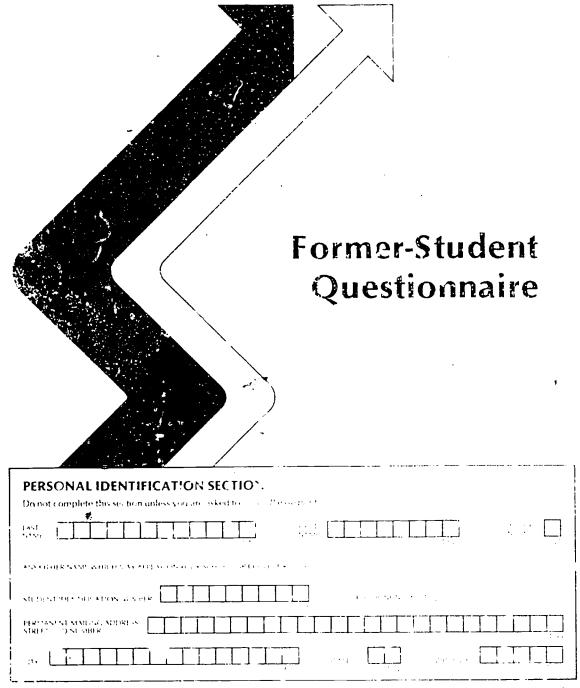
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National Center for Higher  $e^{ij}$  -Cation Management Systems The College Board







## INSTRUCTIONS:

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8. From the list of goals in question 7, place select the three that were most important to you when you attended our college. For example, if your most important goal was. To obtain a certificate or degree enter the letter B in the first box.    Most	14. What was your premary enfolfment states when you attended our sollage?  2. O Primardy for credit stail time (12) smore hours for each term enfolled.  2. I Primardy for coedit sport fine class than (2) no in the cach term core linds.  2. Primardy and for each fit.
9. What degree were you seeking when you attended on college?  =0. Not seeking a certificate or degree.  1. Certificate of one year or less.  1.12-2. Certificate of more than one year.  3. Associate degree.  4. Office.	14. While yea week enrolled, how many bears det you normally work when classes were being held?  4. Gwas not employed  1. Employed 1-1C hours per week  2. Employed 21-35 hours per week  4. Employed 21-35 hours per week  4. Employed 36 hours or more per week  15. Old you apply for financial assistance floars it scholar depr
10. a Pierse write in your major of steases stady as sections with a	while at our college?  O Yes, and I recoved it  1. Yes, but I did not recover it  2. Yes, but I left before I teams our it I recovered it  L.4. No.
b. Sook look at tist A: Majors and Areas of Study accounter in the traces below the code of more of the category of which your imagor of their traces traces traces.	16. The decision to leave a particular college can be motivated by a variety of reast is Present in other ties of all of the teasers that content to left to cour decision to leave our college.  Academic Reasers  1. A. Achieved my academic sals.  146. B. Gransferfed to another college.  147. C. Seeded a break from college.
Via Wall care officiency of this content O Yes -1 No  D It no what kind of college was year first choice.	14 Discost sesper grants Lw. I ted we renot available 130 L. Disartote with my academic pertournerse 14 Discost of with the quality of tracking 130 C. Dissartoted with the learning environment 14 Course work not what I vanited
O A public two year college or university A patini tear year college or university A private college or university A vocational technical school, hospital school or nursing trade school, or business school  —4 Other  What was the name of the college that was courter to chance?	Considered by academic paid  Cother  For ead Reasons  Cod not have crough no very to conting a  Cod not have crough no very to conting a  Cod do not continue an emit town all ad  Mod Cod do not can emough more, while enrolled  So Other
12. When you left our college, what was your over ill grade point average (C PAP 0.400 to 301 1.300 to 2.01 1.300 to 3.00	Cobor Reasons  1 of Co. Achieved my person quals.  2 of Co. Achieved my person quals.  3 of Co. Achieved my person quals.  4 of Co. College experience individual construction.  5 of Reason people I could adentify with.  6 of New docated the area.  6 of Co. College responsibilities became too great.  6 of College responsibilities became too great.  7 of College responsibilities became too great.
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v 5	O	1	,	1	Reading writing math and study skills
					improvement
,		1	2	3	Latoring
	e o	1		ţ	Minority attairs
		1	٠.	,	College cultural programs
	13			1	Recreation and athletic programs
+ -	+ 1	1		3	Enancial aid
14	• 1	1		1	Student employment Const
	(1	1		ł	Career planning
٠,	. 1)	1	2	ţ	tob placement
٠.	. 0	i	2	1	ausing services
٠.	()	;	?	4	Cateteria
-	٠ ()	1		ţ	Health services
٠.,	. ()	1		ι	Dibrary
,	. 0	1		3	C'ad care
٠,	. B	ţ			Buckstore
٠,	. ()	1		;	Parking
٠.,	. 0	;		1	Campus security
		,	,	,	

19. a. Dososa carrently have plans for additional education? ...o. No not at this time.

- 1. Yes. I plan to recuroff at this college
- $\epsilon \approx 2/3$  ss, thave already enrolled at another  $\epsilon_{\rm c}$  above
  - 3. Yes, I plan to enroll at another colleg-
  - 4. Lam currently undecided about any additional education
- b If you circled responses 2 or 3 please write in the name of the college you plan to attend or are attending

# ADDITIONAL QUESTIONS SECTION

Additional questions may have been added to this printed form by your college. If you have been asked to answer additional questions, please use the boxes below to record your responses.

.00	21	<b>2</b> 2	23	24
19	196	. 197	198	1911
25	26	27	28	29
200	501	202 🧠	100	.a:
30	31 -	32	. 33	34
205	John John Committee Commit	207	200	2024

Flease use the space below for all a minerity you have about our college, this questionnance or anything of a you care to share with us

organisments ter



PERSON'AL IDENTIFICATION SECTION

Do not complete this section, miss you are asked to discuss out to the section of the sectio

National Center for Tigh, r Education, damagement Systems The College Board







### INSTRUCTIONS

Specific directions are even for completing classe of the questions in this questionnaire. Where it is efficiently are got a please can be the number of letter of the most appropriate response such as in the sample question by a si-

Sample:

4. An you currently man ed?



If you are not currently married you would be letter

1. What is your sind

o Female

-1 Male

2. How do you describe your oil to re-

-- 0. American Indian of Mark in terms

1 Asian Pacific Islander c. Europe

2. Black of Afro American

CHO mic Chicano or Sport Aspect on Sport can

4 White or Calicosom

S.5 Otto

3. How old are you?

2 Under 18

1 (18 to 22 year)

2 . The Presents

3. 26 to 30 year.

\* 4 31 to 40 veloc

or 41 to fathering

6. Mac observe.

TO SEARCH DOM

4. Areas as unwitten arried?

· · · 0 Yes

5 long control that you have a permanent hade one-

Circle all that argify

1 Yes, restricted in Juliay

3 Yes, r-stricted hearing.

3 res, restricted vision

3. Yes, but I prefer not to record to the con-

5 Other \_\_\_\_\_.

6. How long did you attend out a see a

ii One - m

1 On Lost

2.1 % ears

3. Three cours

4 Europears

A Man that to start to

The ballowing of the experience of the consent many on longer and the comment of the present the the letter of to suggest a management of many terms of their constitutional The second of th Section of the Control of the Contro

There is allowed emportant from a when factors feet rescollege

These goals Lam achieving arthuse achieved

Acad	emic	Cou	

A. To increase my knowledge and understanding in an academa todd

B. To obtain a certificate or degree

To complete courses necessary to transfer to another educational list fution (

• () Oher\_\_\_\_ · D

Career-Preparation Coals

98 E. To discover care it intillests. w E

100 F. To forme stelling to meanwer; instander Louis

tor G. Box G. To prepare torialnew career.

w. H. Other.

Tob. or Career Impresement Coal.

· 1 To caprove my knowledge technial skills instor compatible as for my pabler cares.

Homoreuse my chinces for a raise and or 107 1 per introduction

in the contract

Social, and Cultural Participation Coals.

To become actively in object in student life and compas activities

2. 5th Teamerous my participation in culture, and ٠,٠ son devents

to the transaction of the

Complete

Personal Development and Emickment Coals

in a featurement's self-confidence.

 $\mathbf{Q}=\mathbf{I}_{\mathrm{GM}}$  prove my leadership  $\mathbf{S}_{\mathrm{MC}}$ 

there is a common mits to get along with a their

To seven skills that we come bony disk life. a make me a mornion ( ) in persona the Second page ability to be independent out to continued and pto con-

there . ;

British the foreign of the grant of the an infinite the state more garage assumed to the entire production of some after the The property of codes for a first of digital state of the property of was 100 for the control of conference of the confe Los will be Barbatation

Sec. of Most Department of the Communication of the Hard Most r Barrier L. J. 📑 pertant L



9. What was the most recent certo-cate or degree v	15. W
received from our college?	* 1
— O. Certificate of one year or less	
1. Ceraticate of more than one year	
2 Assoc to degree	14.24
3 Other	
10. a Please write in the major of area of still classes afted	,
with the certificate or degree returned to in question 9	
,	
	16 3
5 Now book at List A: Majors and Areas of Study and	
enter in the beres below the code number of the	
stegors, rewhich your major or are, it study talls	
	:
<u> </u>	
1. If you plan to continue your concerns what a re-	
highest degrees voic <b>ultimately</b> plan to emin <sup>2</sup> > 0 scentificate	
1. Associate degree	
2 Bachelor's degree	
rico al 3 Marters degree	17. F
4 Specialist degree (e.g., Ed.S.)	(
<ul> <li>Protossional degree to gomedicine law its clears</li> </ul>	
on Doctoral degree e.g. Pr.D. Ed.D. D.B.N.	1.40
12. Have visit sken any beensing or certification examination	
relation of your major priates of study at our college?	
en Yes, I have taken and proced an exam-	
, Tres. I hove taken are can but do not yet know	18. [
the result	,
2 Yes The letaken an exam but d. I not pass	
3. No. 3 have not taken any eyens of at plan codo so	: •
≟4. No and I decr — san to take my	
13 Some completing your program at our college have but	19
corolled at another of legel	• •
10 Yes 21 No	
=1 No	
► If No. skip to quest c 29	
14 a "Shat kind of college did and first attend after a	1/-
compaged your program at our college?	20
O A public two year coilege	
1 A public four-year college	
2. A private college or university 4.2 A sociational/technical school, busy 24, with 1997	
eursing trade school, or business school	
1 Other	

by File volumente in the name of that consequent

that certificate or degree were you seeking of the shege retirence or naparstron 147. -m Cerntugo 1. Associate degree 2. Bachele is degree 3. Master's degree. a specialist degreede (FdS) 5 Professional degree (c.g., ciedic ne fass if enlogy) e. Disctoria degreete g., PhD, EdD, DBA. Ple, lewrite as your intended major or area of study in the college referre. To in question 14  $\gamma_{cosy}(k) \propto a_{\rm c} \sin at$  Eist A: Majors and Areas of Study and enter in the boxes below the code number of the cuts gory in which your intended major or area of study at the college referred to in quession 14 talks. How well did our college, by the courted and additional college work? -0 Excellent preparation 1 Good proceration 2. Adequate preparato n 2. Inadequate preparation -- Does not apply Did you transfer any credit from our college toward your advational colories weeks on Yes 1. Not I did not try to be aster any credits. 2. No. 1. Additional were not accept to Stessor - mentis emprovedi. To Nes There a full time object side of it is home. 1 Nex Thave a part time polloutsubject the name. 2. No hair not cur ently employed cutside of the non-e وفي الإدارة والمراوي وفي والمراوي والمراوي المراوي المراوي والمراوي والمراوي والمراوي والمراوي والمراوي والمراوي a Design County tent oder govern timbengmen

dequision teach in

to Some ford at 5 st B: Occupational Title and enter in the horses have the code in other of the category as small as invarient or call.





34

21. After completing your program at our college, how long did you look to were before obtaining your first job?  O Heef a job which continued after the ompleted my programs.  1. Obtained a job just prior to graduation.  2. Less than two months after graduation.  3. Two to three months after graduation.  4. Four to eight months after graduation.	24. How well did our college prepare you as your first poble—  O. Excellent preparation  1. Good preparation  1. Adequate preparation  3. Inadequate preparation  3. Adequate preparation  3. Inadequate preparation  3. Sociapplicable to first job
22. How did you first job?  O College placement affice or protessor  1. Professional peroxic also rorganizate is 2. Civil Service application. 3. Employment agency 4. Newspaper advertisement 5. Direct application to employer 6. Friends or relatives  7. Other  23. What is was you annual salary or wage in your first pip?  1. Sac(X) (c. 55. 999) per year 1. \$3.000 to \$8,999 per year 2. \$6.000 to \$8,999 per year	25. In what extent is was your first job related to your major or area of study at our college/  10. Directly related 11. Somewhat related 12. Not related 13. A somewhat related 14. On related 15. It you currently are not employed or are not working in a job related to your major or area of study at our college, which of the following 15. I never looked for work related to my major or area of study 1. I looked for work related to my major or area of study of the following study 1. I looked for work related to my major or area of study of the following study 1. I looked for work related to my major or area of study of the following study 1. I looked for work related to my major or area of study of the following study study at our college, which of the following study study at our college.
3 \$9000 to \$11,999 per year 4 \$12,000 to \$14,999 per year 5 \$15,000 to \$17,999 per year 6 \$18,000 to \$20,990 per year 7 \$21,000 to \$2,0990 per year 8 \$24,000 or more per year	27. Whether you are currently employed or not, would you be willing to move to another community to work in a job related to your — (jor ( rarea ) ) study at our college?  159—[0] Yes 159—[1] No.
ADDITIONAL QUESTIONS SECTION  If delitional questions may have been added to this printed form questions please use the hoses below to record your response 28 29 10 31 12 33 34 17 19 19 19 19 19 19 19 19 19 19 19 19 19	

Please will the **space below for any comments** you have at our capitally all capables many an anything ease **v**olume to have with as





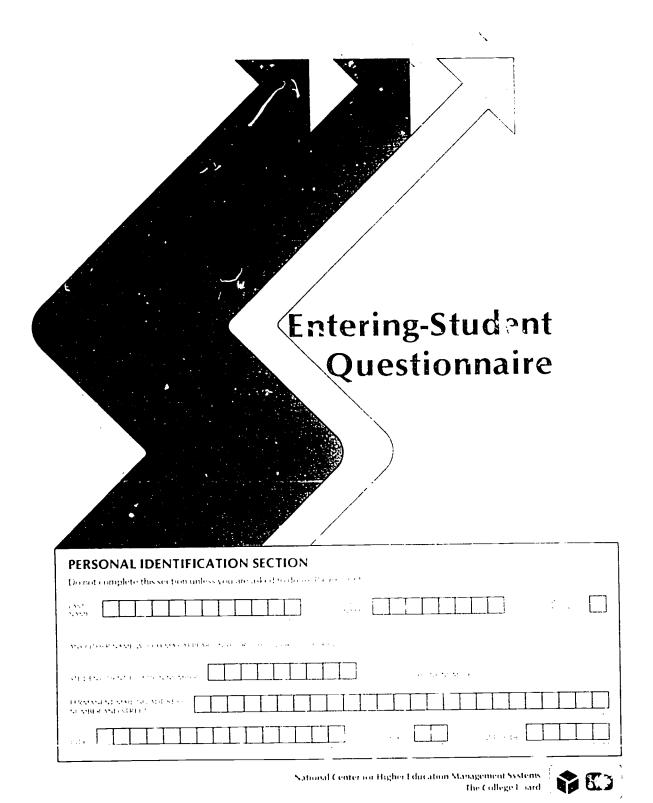
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# APPENDIX 2

The Four-Year Colleges and Universities

Questionnaires







### INSTRUCTIONS:

Specific directions are given for completing many of the questions in this questionnaire. Where no directions are given please circle the number or letter of the post appropriate response such as in the sample question below

Same

4. Are your arrestly married

It you are not current, married were would conclude number 1

- I And Arabes
- content to
- 1 Marie
- 2 , the section yield described a contract of the relation  $\epsilon$ 
  - in Arms can induction  $\hat{N}(t) \star m(S(t))$
  - 1. Asian Parente founder of Europe
  - 2. Black or Mrs. Vision on
  - Thispania America of Spanish and ing American
  - 4. Albertanich beziehren
  - -----
- 1. He as salt the court
  - O Code P
  - 1. TRACE STREET
  - A March Same

  - Algebra Bit years.
  - 4 of to 40 years
  - 3-41 to 50 years.

  - " of gears of more
- 4. No year currently married?
- O Yes
- 5. Do you feel that you have a terminal contract of the Circle all that apply
  - 0 No.
  - 1. Yes, instricted modules.
  - 2. Yes restricted here no
  - Ches restricted listing
    - And suger produced because of the contract
  - 5 (O9) er

- 6. a Have you previously enrolled many postsecondary
  - educational institutions is you have employed in notice propose of precise a resort of the state of
  - is See I have not been previously enrolled
  - to Yes or the institution
  - gross at a public two centrollesses
  - less at a problem to an year college on a rusers to
  - 4 (x) our appreciate college or university
  - solve at a vocational technical school, hospital Exclusionising, trade school or business school

  - ending a new attended another college an ease wishe in growing of the one you most recent's attended.
- The following statements reflect the goals of many college students. Please circue the letter of an these news that are important to you.

Vendemic Coals

- N. Teemerease my knowledge and understanding in and ademic to id-
- B. To obtain a continuate or degree
- C . To complete courses necessary to transfer to another education duestitute o-
- D Other

Carese Preparation (wal-

- F. Torchscoper my categorishere dis-
- 3. To toroughte long form care explains, adder goals.
- ice, Technopae for a new career.

place a Copper Improvement Cools.

- to the improve my knowledge, technical skills, and or competencies required for my job or career
- 1. The range as may changes for a russe and or
- promotion
- Land of the
  - Social and enteral Participation Confi-
    - 1. To see chemisticely minisped in student life and compassin teather.
    - At Teams tease my participation in cultural and and all engineers
    - Sc. Learniert propper
    - ( ) ( )\*\*\*\*\*

Perama Development and Establish Coals

- p. 1. comessems self-confidence.
- op to improve my leadership skills
- R. To improve my ability to get along with others
- 8. It clears skills that will ensuch my daily life or im ike moja piere complete cersen
- to be developing ability to be independent act resent and edaptable



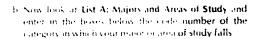
8.	From the list of goals in question," please select the
	three that are most important to you and enter their
	codes below. For example, it your most important goal
	is. To obtain a certificate or degree center the letter B
	in the test hos

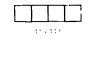
Most Important	Second Most	Third Most Important
1141	:1:	••

### 9. What degree are you currently working toward at our college, and what is the highest degree were ultimately pian to earn! Circle a number in each column.

	Corrent	Ultimate	
	- 11	0	🔨 i kredang a certit categor
	i		degrees
	1	1	Certitic ate
		2	Associate degree
	1	1	Bachelor's degree
114	•	***	Master's degree
	5	ñ	Specialist degree (e.g., 1 et s.
	11	h	Professional degree eng
			me home lass theology
	\ <del>-</del>		Doctoral degree e.g.
			PhD LaD DBAs

### 10. a. Please write in your intended may it or are not study at our college.





### 11. What is your intended enrollment status?

- r-o Primarily for credit full-time (12 or more hours each term enrolled)
- the A. Primarily for erecitive partitime (less than 12 hours each term enrolled)
  - Primarily not for credit

### 12. What will your primary employment of compution status be during your first term at our college? Circle the most appropriate response.

- =0. Employed more than half time
- 1. Employed half time or less
- 2. Homemaker, not et ployed outside of the berge.
  - E. J. Not employed but would like to work.
  - \$44. Not employed and do not care to with winter attending college

- 13. The decision to attend a particular college is usually anthropic od by a variety of factors. Please cardo all of the actors that influence began choice to attend our college
- A Academic reputation of our college:
- B. Coarse offerings.
- C. Former student's advice-
- 11) Year her year triend sodynee
- L. Counsolor stadynes
- 1. Engloyer's suggestion
- 1. Will help me retain my current emple on a 11
- H. Costs
- 3. Ayanability of Imancial aid
- Institution's social reputation
- close to home
- 1. Wanted a change in scenery or location.
- At Range and availability of student services
- N. Learnidonphy with follow students
  - to beconvenient to go elsewhere.
  - Other

- 14. How did you learn about our  $\operatorname{college}(P)$  , so a new all items that apply
  - O from people at my bugh a head
- 1 From relatives, triends, or acquaintain, es-
- 149 2. From a representative of this college:
- 3. From a college placement service or some other 140 education into anicholos serva e-
- ٠;٠ 4. From a college catalog.
- 5. From that end I recover in the shad . 1.
- 6. From material I read in a new spaper of negation
- 7. From a rathe of IV and this area. 144
- 8. From a vintermation display as investigation for shopping center occupts that or similar for its
- A ( ) ( ) ( ) ( )

# 15 to 35 embly college to or first choice?

- $z = \left(\frac{0}{1}, \frac{1}{N}\right)$ 
  - in It no which and of college was your first choice?
    - O. A public two year college:
    - 1. A public four year college or university
- 2. Apprecate college or university
  - 5. Some attenual technical school. Euspatal school an irsing tradeschool of the loss school

### of Other

What was the name of the college that was your first choice?

- 16. Dicyog plan to apply for financial and at our college? 1) Yes Thave already applied
- race is next (planto applix)
  - = 2. See I do not think I will ever apply





. . . "



17.	When would you most prefer to take your classes?
	Circle one

- p=0. Weekday mornings
- 1 Weekday atternoons
- 2 Weekday evenings
- 3. Anytime during the work
  - 4. Anytime during the weekend.
  - 5 No preference

- 18. Do you plan to enroll at our college next term?
  - ... 0 Yes
  - 1. No. Ewill complete my program this t. tm.
  - $2/8\alpha$  but I plan to return at some time  $\alpha$  date
- 1994 3 No. I plan to transfer to another college.
  - 4. No. I have no plans for additional education at this time.
  - (3) I do not yet Snow my plans for next term.

ADDITION										
Additional quest questors pleasons pleasons pleasons pleasons pleasons 19 20 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	cuse (ne	hoves b	eless to	24	0.00	the rin by one are are $\frac{1}{26}$			 	. —

Please use the space below to a comments a collaboration college, this questionnaire, or anything else you care to dark with is

1

16. \$164+884811.1883 3665-2781 P.Redi 2B 8.996



## LIST A: MAJORS AND AREAS OF STUDY

## Programs usually requiring four or more years of study

0100	Agriculture and Natural Resources
0200	Architecture and Environmental Design
0300	Area Studies (includes Asian Studies, Black Studies, etc.)
0400	Biological and Lite Sciences
0500	Business and Managemen.
()(50)	Communications
0700	Computer and Information Sciences
0800	Education
()()(P)	Engineering
1000	Fine and Applied Arts (includes Art. Dance: Drama: Music, etc.)
1100	Foreign Languages
1200	Health Protessions
1300	Home Economics finelides Clothing and Textiles Institutional
	Housekeeping and food Service Management, etc.)
1400	Law
1500	Letters (includes Creative Writing, Licerature, Philosophy
	Speech etc.)
1000	Library Science
1700	5 athematics
1800	Milit. (v. Sciences)
19981	Physical Sciences (includes Chemistry, Physics, Earth
	Sciences etc.)
2000	Psychology
2100	Public Attairs and Social Services
2200	Social Sciences (includes Anthropology, Economics
	History Political Science, Sociology, etc.)
23(8)	Theology and Religion
39(X)	Interdisciplinary Studies
6000	Other
7(KX)	Uncomided becombined program of four or more years

## Programs usually requiring less than four years of study

7(0(0)	Business and Commerce Technologies (includes Accounting
	Banking, Commercial Art, Hotel and Restaurant Management
	etc1
5005	Secretarial Technologies (includes Office Supervising and
	Management, Stenographic and Exping Technology etc.)
5006	Personal Service Technologies (includes Stewardess Training)
	Cosmetologist, etc.)
5100	Data Processing Technologies (includes Computer
	Programming, Keypunching letter
5200	Health Services and Paramedicas as a thrologies (includes
	Dentai and Medical Assistant Technology, TPN/Occupational
	and Physical Therapy Technology (etc.)
5300	Mechanical and Engineering Technologies (includes
	Aeronautical and Automotive Technology Welding
	Electronics, Architectural Drafting etc.)
5317	Construction and Building Lechnologies and ludes Carpentry
	Plumbing, Sheet Metal, Heating (etc.)
5400	<ul> <li>Natural Science Fischnologies fineludes Agriculture Technology</li> </ul>
	Environmental Bealth Technology Torestry and Wildlife
	Technology, etc.)
5404	Food Services Technologies (includes Food Service
	Supervising, Institutional Food Preparation, etc.)
รรณา	Public Service Lechnologies (includes Law Enforcement
	Technology, Teacher Aide Training, Fire Control Technology,
	Public Administration Technology, etc.)
5506	Recreation and Social Work Related Technologies
0008	Other
(KK)	Undecided but probably less than touryear program

Note: On the actual SOIS Questionnaires, LIST A is printe <sup>1</sup> on a panel extending from page 2. Because it is identical in all questionnaires, it is reprinted in this appendix only once

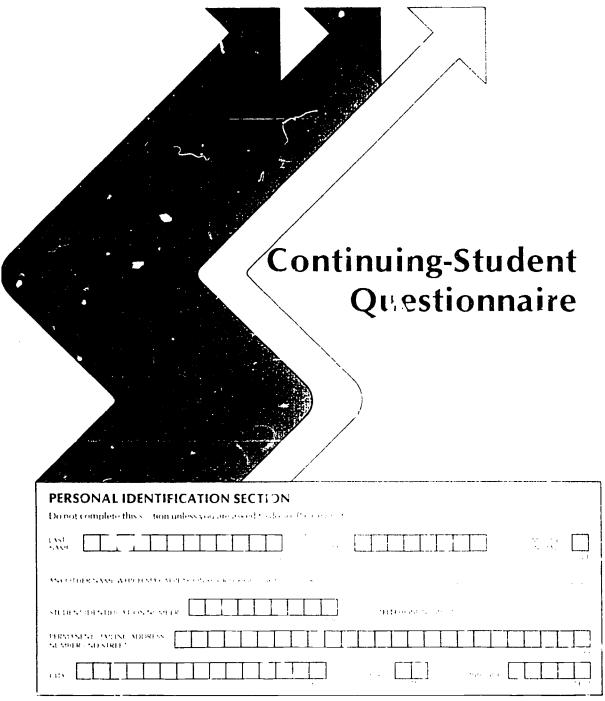


## LIST B: OCCUPATIONAL TITLES

- 01 Agricultural and Forestry Occupations Fishers, and Hunters
- 02 Clerical Occupations
- 03 Construction, Drilling, and Mining Occupations
- 04 Engineers and Architects
- 05. Executive: Administrative, and Managerial Occupations
- 06 Health Diagnosing and Treating Practitioners
- 07. Health Lechnologists and Lechnicians
- 08 Marketing and Sales Occupations
- 09 Material Handlers, Equipment Cleaners, and Laborers
- 10. Mechanics and Repairers
- 41 Military Occursitions
- 12 Natural Scientists and Mathematicians
- 13 Surses Pharmacists Diet tuns. Therapists, and Physicians' Assistants.
- 14 Production() coupations (Occupations concerned with setting up, operating, or sending of machines and with hand production, usually in a factory or shop)
- 15 Service Occupations
- 16. Social Scientists, Social Workers, Religious Worker—and Lawyers
- 17 Teachers Librarians and Counselors
- 18 Technologists and Technicians (except Healtia
- 19 Transportation and Material Moving Occupations
- 20 Winters, Artists, Editors, and Athletes
- 21 Orber

Note, LIST B, printed on the backsade of the panel showing LIST A, is included only with the Recent-Alumni Question-naire; in all other questionnaires this panel is of ink





National Center for Higher Education Management 1 vistems
The College Board







### INSTRUCTIONS:

Specific directions are given for completing many of the questions in this questionnaire. Where no directions are given, please circle the number of letter of the most appropriate response such as in the sample question below

### Sample

4. Are year currently married?

(1)\*\*\*

It you are not carrently morned you would car a stip

- 1. What is your end.
- C. Female
- 2. He wildown a dissert to the control of the con
  - to American a diamentalise to Nation
  - 3. Asilio Paistre Islandor of Figure
  - 2. Black or Mrs. American.
- 3 Hispania Chicano of Spanish speed it. American
  - A Whippion Could come

A CARLO

- Cross old are you?
  - at trader IR.
  - \* 181 (22 see )
- A. Distriction of the
- to the straighters
  - 5,41% 50 years es of postal poars.
  - \* of years or more
- 4. Newson currently marrood?
- 0 Yes
- 5. Do you feel that you have a partition of the state Circle all that apply
  - A NO.
- 1 Yes restricted mobility
- A Year root is ted bearing.
  - 3. Best restricted vision in
- $(-4,Y) = (y^{\alpha})^{\alpha}$  prefer not to be so to form that in
- 5 Option

- 6. How long have you been at our college?
  - est). Oper fermi
    - 1. One year
    - 2 Two years
    - 3. Three years
  - 4 Four years
    - 7. Levely ours
  - 6 Societas
  - More than six years.
- The following statements reflect the goals of many college. students. In the first column, please circle the letters of those are in that are important to you at this time. In the second common contactible letters of those goals was tool was are acts overproting concluding

These goals are important to me at this time

These goals I am achieving or have as hieved

, 111 143		90 9. 94		Academic Coals  To increase my knowledge and understanding in an academic field. To obtain a certificate or degree to complete courses necessary to transfer to another educational institution.
95	υ	(in	D	Other
97	E F	98 100		Career Preparation Goals  To discover career interests  To turnidate long terricum a plans and or goals
167	(	• •		Toprepare for a new + ar, et
103	н	٠.,	11	Other

- Tob. or Career Improvement Goals so the same to assumption only knowledge technical skells and in competencies for my job or career (a) it is the property of the second of the premotion
  - and the cither

Social, and Cultural Participation Catals

- p. To be cone actively involved in student life and campus activities.
- Months St. To increase my participation is cultural and are all events.
- No. 1 Transet per aple
- Carrotte Company Personal Development and Less himent Goals
- and the entire professional self-confidence To approve my leader haskers
  - $g = \gamma_{\rm so}/R$  . To improve my ability to get  $\langle \alpha m g | w \rangle ch$ diams
  - Some Soll Tralegm skills that will enrich invidady life or make mir a moter complete person.
  - to Tools, and Tools elop now ability to be independent self-resent, and adaptable.
- end of the Other



8. From the list of goals in question 1 please select the three that are most important to you at this time and enter their codes below for example at wear most important goal is to obtain a certificate of siegeenter the letter B in the first bee-

Sheet Important	Second Mast Important	Mary Steet
* *	•	

9. What degree are you currently were rule toward in a college, and what is the best out degree as a ultimately points earn? Circle a nomber on earlier

	Carrers	U + 11 34	
	13	- 11	Survey by a comment
			desire e
	•		Carlot Grant
			Visited the pergraph
	:	1	AND THE STREET
: •	• :	:	Marie of grant
			Specialization of the first
		•	Professional and professional
			the state of the state of
			Charles and Articles
			AMERICAN PROPERTY.

- 10 of Pierse with this contribution of the both study Attended to the pro
  - to New 1994 of List Ar Majors and Areas of Study and leader of the cross tops within code number at the later of a what is also up nor area of stade falls.



- 11. What is your mended enrolln ent status?
  - 0. Priming for credit -- fall-time (12 or more): 12 each term enrolled).
- and A. Primarny for credit in part-time flex than of the coeach term enrolleds
  - 2 Unimarily not for credit
- 12. What is your primary employment or as experted of the at this time? Circle the most appropriation science
  - 0. Employed more than half time.
  - 1. Employed half time or less
- 4. 3. 2. Homemaker, not employed outside of the force of
  - 3. Not employed but would like to work in a
  - 4. Not employed and do not care to work at a and rating with me

- 13. When would you prefer to the country's less
  - O. Wood day mornings.
  - A Aread Landing Con-
- The Arekday overlags

  1. Anstan ordering the works

  - 4. Amphier and providence was exercised
  - . The state of the
- 14. These upon term is about trab persect term
  - 4 50
  - $(2+\epsilon)$  , will complete my program this term
  - 2. Note that I is an fortesture at some future date
  - \*\* \*\* \*\* pointo transfer to another college.
  - 4. Note to elemo plans for additional edition of the ef
    - dismits of knowing plans for next terms
- 15 it is enorming to each and which of the tolk along a true Sevent
  - = 0. I have received timancial and
    - I. Thave applied for fine scales of stay of the en-
- and a Chave not applied for the real and other points.
  - spins to be tuture.
  - ►1 I do not thirt I will occur op: ...
- 16. The tollowing the person provided to cooleges from would be a subject these services are provening to the con-college? For each case, we are not the consequence of the response that a most appropriate

I did to the concentration are the

- Territoria de la companya de la persona de la companya della companya della companya de la companya de la companya della compa
- the property of the contract of the property of
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    - organisa nama
  - .... . . Mason to attend
  - o · . his Begger and Josephin John K.
- 1 1 2 Recreation and athlete programs
- . . . Correctal and
- 6 1 2 Student employment
  - $0.03\pm2$ Careera lamona.
  - $\cdots : ::$ teachine ergent
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- 8 O 1 2 details
- 4 43 1 2 5 Child care
- 74 O 1 Burn Katharia 3 G 1 2 Parking:
- comparison of the
  - . . . . . . . . :::..:



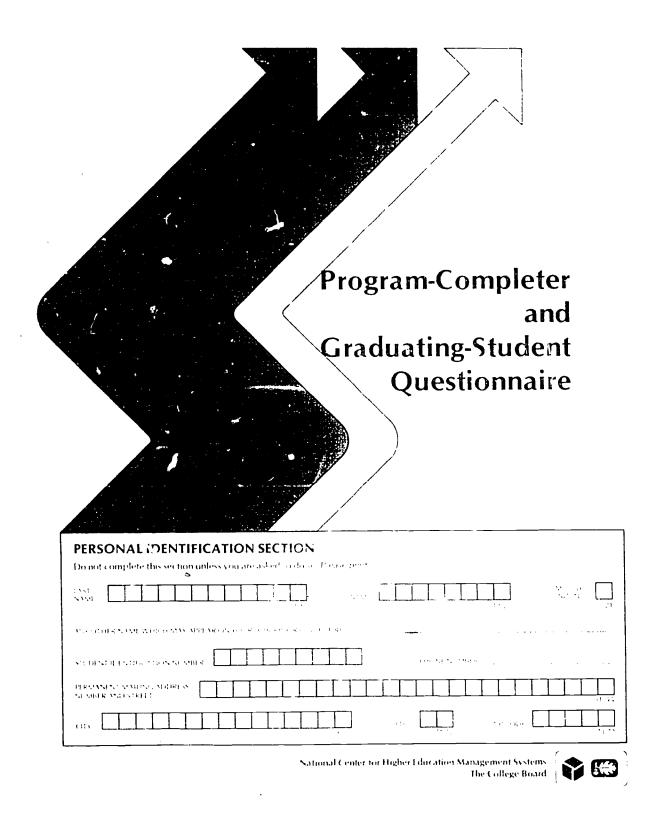


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Addition quest on 17	al quest s pleas LB 18	19	DOMEST	elew to t	(474 415+1					_	

Please we the given of wifer any comments confine at our codege, the qualifornaire, or anything else the care to share with a

4

e disambers total description Research





### INSTRUCTIONS:

Specific directions are given for completing many of the questions in this question naire. Where no stress to is are given please on le the number ar letter of the most appropriate response sonly as in the sample question below

Same

4. Are you carried by burried?



Blycu menot currently menodic cownictions (4)

- 1. What speak is t
  - o the se
  - 1 31 15
- 2. How are provided the visitor of the contra
  - to American Indian of Tolorian Service
  - 3. Asian Pacidic consider extensi
- 2 Biograph After North Con-
  - Collegians, Checker 1985, 1997, p. Bang American
  - 4 Action Commission
  - e comme
- 1 16 King to a com
  - October 57
  - 1. 16 to 27 years
  - 2.2336.233666
- A. 26-by Revents
- 1 4 Mooder coars
- A. Massamanas
- is fill three sears
- " 61 years or more
- 4 Are your corrects married?
- 11 Yes

- 5. Do you teel that you have a tier of continued and in Circle all that apply.
- 0 No,
- 1 New restricted mobility
- 2 Yes restricted bearing
  - A Yes restricted vision
- $(4.06)^{\circ}$  , but if professional to reconstruct the  $(4.06)^{\circ}$

- 6. How long have your research in releigh
  - o Orașterio

  - 2 Iwoveas
  - 4. Three years
  - 4 Four years
  - a Liveryears

  - 1 More than six years
- The following statements reflect the goals of many college as about a In the first column, please conclusive letters on these sals that are important to you at this time in the secured column, challe the letters of those was a second common the one or nave achieved

These goals are in portant to me at this time.

These goals I am achieving or have achieved

- Academic Goals
- To increase my knowledge and understanding in an academic field
- To obtain a certificate of degree. 9. B 91 B
- To complete courses necessary to transfer 93 C Scanother educational institution
- w. D. Other 95 [)
  - Care or Preparation Couls.
- To the Todiscover career interests 97 E
- To formulate long term career plans and or au Ε '... ! goals
- tot Consider. To propare for a new care-
- Howard H. Orler
  - Jose or Career Improvement Goals
  - Tramp ove my knowledge, technical skills and or consetencies for my job or career
    - To me rease my chances for a raise and or promotent
  - Other
    - Social, and Cultural Pyrneipation Coals.
    - To become actively involved in student Lie and campus activities
    - (3) 33 Formerease my participation in editoral and 1.1 social ments
    - specification to meet perspect
    - $\sim$   $\sim$   $\sim$   $\sim$
- Personal Development and Enrichment Goal Tremereuse my self-confidence or a P
- To approve my leader ship skills
- $R = \mathbb{N}_{\mathbb{R}^{d}} \setminus R$  . To improve my ability to get along with other
- To learn skills that will enrich my daily life o < · · · < make me a more complete person
- 1. For the Toodevelop my ability to be independent,
- self-reliant and adaptable.
- 1 / 106.0



8. From the list of goals in question 7, please select the three that are most important to you at this time and enter their codes below. For example, if your most import of goal is "To obtain a certificate or degree enter the letter of in the first box."

Most Important	Second Most Important	Ind Most
• 11	1 1.	•

Which of the following are you receiving from each college?

- E0 Cereticate
- 1. Associate degree
- 2 Bachelor's degree
- 101 1 Master's degree
  - 4. Specialist degree feig. Ed.S.).
  - 5 Professional degreeing medicine law throbac-
  - Lite Doctoral degree (e.s., PhD, EdD, DBA)

 a Please write in your image, a area of study while at our college.

b. Now look at Tist A. Majors and Areas of Study and enter in the posses bolow, the coefe number of the category in which your major or areas of study fulls.



11. What has been year primary introlliment status while attending our colleger

- t) Primarily for credit -- full-time (12 or more hours -- each term enrolled)
- 1 Premardy for credit part-time (less than 12 bourseach form corolled)
  - -2 Primarily not for credit



 For the program you are now completed, were inof the credits earned from another counge? Proceedall that apply.

rial apply.

- 1. Yes, from a public two-year college.
- 2 Yes, from a public four-year, folloge of about 615.
- and 3. Yes, from a private college or conversity.
  - 4 Yes from a vocational technical school bespetal school of nursing trade school or busine is ebical.

□5 Other . \_

13. The tollowing are services provided by colleges flow would you evaluate these services as provided by air college? For each services circle the number or the response that simest appropriate.

Add not know about this service

- Tkness about this service but did not use it.
- Light Lusert this service and was satisfied with it

Lused this service but was not satisfied with it

	•	۲	*	7	
	O	:		ţ	Admissions
٠.,	ŧ1	ï	2	ţ	Registration
٠.	(1	1	.:	ţ	Business office
	1.3	;	·	1	Academic . 'vising
· ;		;	·	4	Guidance, counseling, and testing
	( )	:	.:	t	Reading writing math, and study skids
					amprovement
٠.	O	ï		3	Latering
		1	2	3	Minority affairs
4.4	(I	1	2	3	College cultural programs
	1)	١	2	3	Recreation and athlete programs
	t i	1	?	3	Financial aid
٠.,	O	1	2	ţ	Studint employment
1.3	0	1	2	3	Career , ilanning
154	0	1	2	3	Job placement
135	O	1	2	}	Housing services
156	0	1	2	1	Caterer
15*	0	1	2	:	the action rate of
••	0	1	2	3	Librar.
	0	1	2	٠	Charle gree
1 + 71	в	1	2	3	Inc. 4 store
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- Constable portal and research that does not yet encountries are get.
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  - 4. 4. Nov. of the forest plans for the any
- 1. Alter are correction employment plans?
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  - ages in the completing threed waterbal program.
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  - is a final currently beginns to each
    - . Car ben stynam to work out to either fromes.
    - 4/17 , comot yet termidated my employ in cot plans
  - s A Carrier

162 0 1 2

THE O !

16. If you come on they can be a starting a new job to what cotten is at related to year monor or a last strety at our college?

- of Directly related
- or on the constitutional of
  - 2. Not related





17. a Do you currently have plans for additional education?

—0. No, not at this time

1. Yes, I plan to reenroll at this college

2 Yes, I have already enrolled at another college

3. Yes, I plan to enroll at another college

L4 Tam currently undecided about any additional education.

bit you circled response 2 or 3 please write in the name of the college you plan to attend

18. If you plan to continue your education what is the highest degree you ultimately plan to early?

p-0. Certificate

1. Associate degree

2 Bachelor's degree

97 — 1 Master's degree.

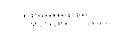
4. Specialist degree (e.g., Ed.S.).

5 Professional degree to g-medicine law theology)

on Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)

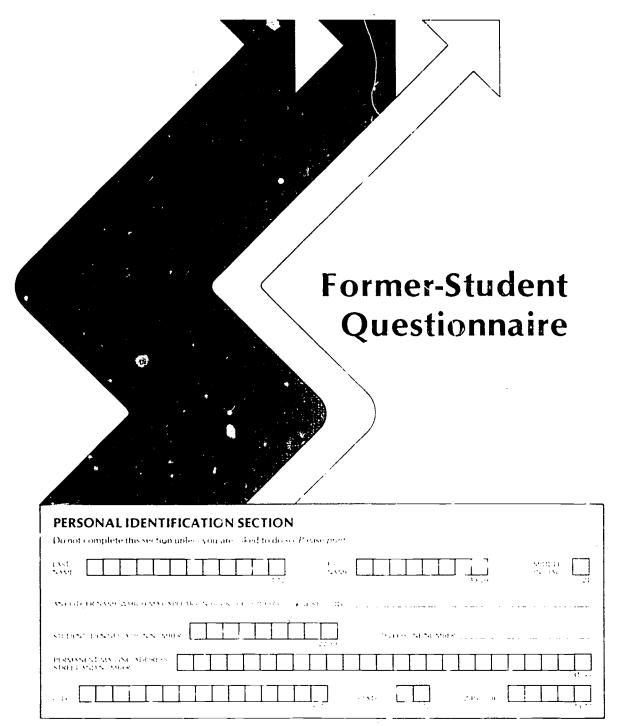
#### ADDITIONAL QUESTIONS SECTION Additional questions may have been added to this printed torm by your college. P you have been asked to answer additional questions, please use the boxes below to record your responses 33 28 29 30 31 3.2 23 25 26 21 22 19 20 100 17.1 137 179 180 1.18 100 1.1 1. 1620

Please use the space below for any comments you have about our college, this questions, he for anothing else constant to state with us



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National Center for Ligher Education Management Systems | The College Board |







## STANDARD QUESTIONS SECTION

#### INSTRUCTIONS:

Specific directions are given for completing many of the questions in this questionnaire. Where no directions are given please circle the number or letter of the most appropriate response, such as in the sample question helow

Sample

4. Are you currently married?



It you are not carrently married you a cold circle the number 1

- 1. What is your serv?
- $s = \frac{o(fem)de}{1/Male}$

2. How dervise describe your office to be a con-

- Without the control of the
- $\leq \chi_{Soft}(\{P_{A}, \sigma_{A}\}) \leq \epsilon (3\sigma^{2})^{-1/4} \leq \epsilon$
- 2. Black of Monday Control
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- ENGLISH OF BUILDING

- Const. Tares 2
  - court to
  - 3. 1 3. 12 Sec. 3.
  - 2.200 (38)
  - to programme and
  - and solutions of a
  - $\sim 37.05\,\mathrm{km}$  , early
  - Electric ratios are filed gazes or more
- 4. An incomment marned?
- 11 30%
- i No
- 5. Do you feel that you have a product of Circle all that apply
  - 0 No.
  - 1. Yes, restricted mobile.
- 2 Yes restricted bearing
  - three restricted visions
- A very must protection to the control
  - . (1994)

- How long did you attend our college?
  - .-O One term
  - 1 One year
  - 2. Iwo years
  - A. Three years
- 4 Four years
  - 5. Exercears
  - to Sockeas.
  - " More than so years
- 7. The following statements reflect the goals of many college malents to the first column please once the letters of those goals that were important to you when you attended our college. In the second volumn, circle the errors or those goals you feel you are achievant or have achieves has a result of your experiences at our college.

These goals were important to me-

These goals I am achieving or have achieved

#### Academic Coals

- 90 A To increase my knowledge and understanding in an academic field.
- B 92 B To obtain a certificate or degree
- 93 C 34 C To complete courses necessary to transfer to another educational institution
- 95 D O Other

Cateer Prepar ition Coals

- ...... E. To discover categor interests
- 99 For the Entermulate long term career plans and of goals
- particularly to Toppepare for a new career.
- in Hose Holder
  - 303 or Career Improvement Goals.
  - 1 Comprove my knowledge, technool syds and or competencies in my job or correction.
- To To increase my charges for a ruse and or promot
- F Other
  - all and Cultural Participation Coals.
- (2) I that ecome actively involved in student life gerbal papers achiefus.
- a 18th Teem reasonny portagoation in cultural and so adjecents
- 💎 🔨 To meet people
- great Combine

Personal Development and Enrichment Goas.

- P. To merode emy self confidence
- and the control of the second teadership skill.
- $\kappa_{\rm e} \approx \gamma_{\rm e} + 30^\circ$  or right-overmy ability to get along with others To learn, kills that will enrich my daily life or make næ a more complete person.
- 1. To develop my ability to be independent admidlant an cadaptable.
- ( 100 -- 1

2

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8. From the list of goals in question 2, please select the three that were most important to you when you attended our college. For example, it your most important goal was "To obtain a certificate or degree enter the letter B in the first box.  Most Second Most Third Most Important Important	13. What was your primary enrollment status when you attended our college?  2. 0. Primarily for credit in full time (12 or more hours)  2. each term enrolled in part time (less than 12 hours)  2. Primarily not for credit.  3. 2. Primarily not for credit.
9. What degree were you seeking when you attended our college?  O Not seeking a certificate or di-gree  1 Certificate 2 Associate degree 3 Bachelor's degree 4 Master's degree 5 Specialist degree (e.g., Ed.S.) 6 Professional degree (e.g., Ed.S.) 7 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)	14 While you were enrisied, how many hours did you normally work when classes were being held?  = 0.1 was not employed  1.1 imployed 1.10 hours per week  12.2 2.1 imployed 11-20 hours per week  3.1 imployed 11-20 hours per week  3.1 imployed 10 hours or more per week  15.1 Did you apply for finance of assistance (foam or scholarship) while at our college?  = 0. Yes, and I received it  1.1 Yes, but I did not receive it  2.2 Yes, but I left before I found out it I received by
b. Now took at List A: Majors and Areas of Study and enter in the hores below the code number of the category in which your major or area of study falls.	16. The decision to I axe a particular college care the motivated by a variety at mass as Francisca Internel effect of all of the masses that continued to your decision to leave our college.
Tanegory in Water voor major of an area and a	Ac Jemic Reasons
	14) A Achieved my academia goals
: 33.138	146 B. I minsterred to another college.
********	147 C Needed a break from concept
	148 D. Courses programs I wanted were not available
11. a. Was our college your tirst choice?	149 1 Dissatisfied with my academic performance
Ories	1 Dissatisfied with the quanty of touching
1.1 No	<ol> <li>C. Dissatisfied with the learning environment</li> </ol>
	137 H Course work not what I wanted
<ul> <li>b. It no what kind of college was your first choic e₹.</li> </ul>	<ol> <li>Fig. 1 is this need my academic goals.</li> </ol>
r-0. A public two-year college ←	that I copper
1. A public four-year colle <b>ge or university</b>	The state of the s
2. A private college or university 3. A vocational technical school, hospital school of	Financial Reasons
3. A vocational technical school, hospital school of	<ol> <li>K. Did not have enough mone, to continue</li> </ol>
nursing, trade school, or business school	(a. 1) Could not obtain sufficient financial aid
4 Other	2. M. Coald not earn enough money while enrolled.
	the Northern
Went was the name of the college that was your first	
• pene 4-4	Cher Reasons
	Sec. O Achieved my personal goals
	ε β Accepted a job or entered β distans
12. When you left our college, what was your overall grade	ser: Q College experience nor what Lexpected
	5.7 R Few people Loudd identity with
point ave <b>rage (GP,A)?</b> —0. 4 00 to <b>3.01</b>	5 - S Moved out of the area
1 300 to 201	202 1 Could not work and go to school at the same time.
141 - 1 200 to 101	16 Use Other responsibilities became too great
(3.100 or less	a V Personal problems
4 Chknown or did not have one	not W. Cable

the three most i	reasons in question 16 please select important reasons and enter their codes imple, if the most important reason was sterred to another college, enter the st box.
Most Important 168	Second Most Third Most Important 100
would you eva college! For e response that is	are services provided by colleges. How luate these services as provided by our arch service, circle the number of the most appropriate.
1 knew about 1 used the larger	about this service ut this service but did not use it us service and was satisfied with it I this service but a as not sate that with it
11 0 1 . 3	Admissions
0.1.3	Registration
0 1 2 1	Be siness office
4 0 1 3	Academic advising
97. n 1 2 3	Cordance counseling and testing
15. 0 1 2 3	Reading writing math, and study skills
• • • •	amptos erment
100 0 1 2 3	Lutoring
15 0 1 2 1	Moonty attins
100	College cultural programs
ten D 1 2 3	Recreation and athletic or squares
561 0 1 2 3	Emancial aid
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164 D 1 2 3	(obsplacement
$\sigma_{\nu}$ , $\alpha = 1 - 2 - 3$	Herising services
Sec. D. V. 2, 3	Cateferia
5-5 O 1 2 3	Health sets a co
6 0121	Librar
5 0121	Child care
(a) ii 1 2 3	Ha with strate
30 0 1 2 5	Parking
Sug. 6 1 2 3	Campus security
194 0 1 2 3	Other
	iro etty have plans for addesonal $\operatorname{ed}(x, \theta)$ $\operatorname{sig}^{x}$
19, a Do you cu	to till have plans for does water to the
= 0 No not	at this time lan to reenroll at this college
Yes Ip	ave already a proffed at another colors?
mary Pres III	lan to enroil at another college
. Jans, Ep	irrently undecided at our any art has a
ecucat	
. 5 It you ci	rcled responses 2 or 3 process states to 0, the college year plans to other distributions.

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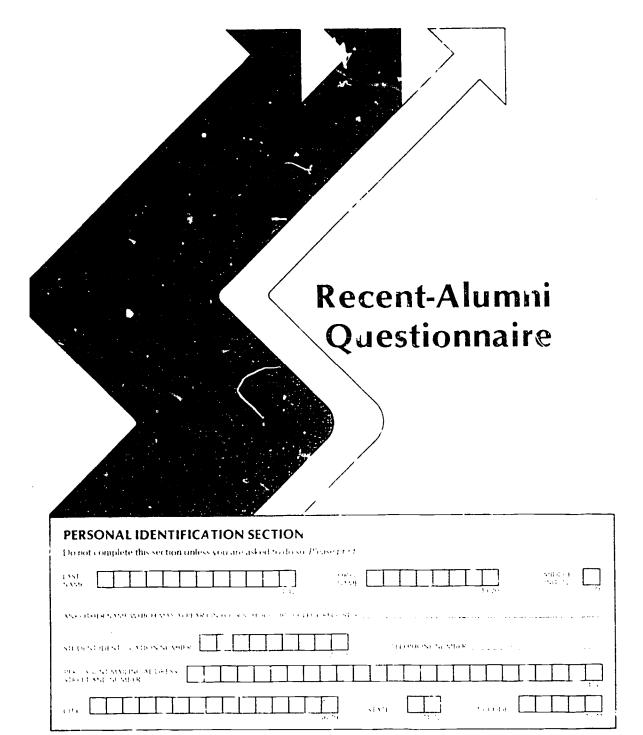
# ADDITIONAL QUESTIONS SECTION Additional questions may have been added to this

Additional questions may have been added to this printed torm by your college. It you have been asked to answer additional questions, please use the boxes below to record your responses.

20	21	22	23	24
1	1194	197	1118	1.4.4
25	26	27	28	29
24.4.1	.01	202	203	2014
10	4041	32	33	34
.05	,41 <b>%</b> .	207	.05	.164

Please use the space below for any comments you have about our college, this questionnaire, or anything else you care to share with us.

Company to the second



National Center for Higher Education Management Systems The College Board





#### STANDARD QUESTIONS SECTION INSTRUCTIONS: Specific directions are given for completing many of the questions in this questionnaire. Where no diffections are given please circle the number or letter of the most appropriate response, such as in the sample quession below Sampl-4. Are you cutrently married? 0 Yes (1)No it you are not currently married, you would circle the 1. What is your ses? n - 0 Temale -1 Male 2. How do you describe yourseld Cacle one 200 American Indian or Alaskan Native 1 Asian Pacific Islander or Edipi. 2. Black of Afric American 3 Hispanic Chicano or panish qual-m, American 4. White or Concasion. 4.5 Other 3. How old are you? 10 Under 18 1. 18 to 22 years 2.23 to 5 years 3 26 to 30 years 4 31 to 30 years 5, 41 to 50 years 6.51 to Alberts 1. 2.64 sears of more 4. Are your screently married? 20 Yes 5 4 So 5. Do you feel that you have a permanent handward the leaffith at apply. 0 50 It Yes restricted modality Yes, restricted hearing Cos, testricted vision 4. Yes, but I profer not to record them the form 5 Other \_\_\_\_

6. How long did you attend our college?

⊢0 One term <sup>1</sup>1. One year i 2 Intrivears A. Three years to 5 high years A. Sixxman -7. More than so years 7. The following statements reflect the goals of many college students. In the first column, please circle the letters of those goals that were reportant to you when you attended our college. In the second column, circle the letters of those pouls you too' you are ach every or have achieved as a tosult a contexpo serces at our college.

These goals were important to me when Lattended th scollege

			I in	se goals Lam achieving or have achieved
	į		1	Academic Goals
	<b>Y</b>		Y A	To increase my knowledge and
			•	understanding in an academic held
141	В	912	В	To obtain a certificate or degree
113	(	93	(	To complete courses necessary to transfer
				to another educational institution
95	D	444	Ð	Other
				Carper-Preparation Coals
97	ŧ.	96	Ε	To disnover career interests
	1	100	F	To formulate long term career plans and or
				goals
101	۲.	107	G	To prepare for a new career
101	Н	1014	H	Other and a summary of the second
				105 or Career Improvement Coals
105	ı	11.0	1	To improve my knowledge, technical skills
	-			and or competencies for my jets or career
107	;	ten	1	To increase my chances for a raise and or
				promotion
100	۶,	110	k	Countries and Committee of the Committee
				Social, and Cultural Participation Cools
			Į	To become actively cooked in statent life
				and campus activities
• • •	51		- 51	To increase my participation in cultural and
				social events
1.1	•.	; ••	`	Formeet people
	( )	:,	()	Other
				Personal Levelopment and Engchment Coals
,	4.	١.	P	To more, le my self confidence
1.11	ı	٠.	Q	To improve my learlership skills
1	ĸ	111	ĸ	Training searny of day to get along with others
*.	`	1 4	`	To learn Solls that will earnehing daily life
			1	or make me a more complete person. To develop my ability to be independent.
•	1		'	selt reliant, and adaptable
				t Miles
٠.	ţ	• .,	1	T What
В	thu cel na	t we Inge Stan	re-m and more clea	tod goals ne e acción." please select the three a stremportant to you when you attended fins onto their codes below. For example, it your ant goal was. To obtain a certificate or degree for Barthe first box.
	in.		- 1	Important Important I



What was the most recent certificate or degree you	15. What certificate or degree were you seeking at the
received from our college/	college referred to in question 142
_0 Certificate	-O Certifu ate
1. Associate degree	1 Associate degree
2 Bachelor's degree	2 Bachelor's degree
, ""	142 - 3 Master's degree
- 3 Master's degree	
4. Specialist degree (e.g., E.J.S.)	4. Specialist degree (e.g. Ed S.)
5. Protessional degree (e.g. medicine law, theology)	<ol> <li>Professional degree (e.g. mechane law theolo, a)</li> </ol>
1–6 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)	~ 6. Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)
a Please write in the major or area of study associated	
with the certificate or degree referred to in question!)	16. a Please write in your intended major or area of study
	at the college refer to in question 14
	,
b Now look at List A: Majors and Areas of Study and	**
enter in the hoxes below the code number of the	b Now look again at Eist A: Majors and Areas of Study
category in which your major or area of study falls	and enter in the boses below the code number of the
, <b>,</b> , , , , , , , , , , , , , , , , ,	category in which your intended major or area of study
	at the college referred to in question 14 talls
11,118	
. It you plan to continue your education what is the	144 ' 1 '
highest degree you ultimately plan to carn?	
~0 Certificate	
1. Associate degree	<ol> <li>How well did our cellege prepare you for your a lditional</li> </ol>
2. Bac befor's degree	college work/
- 3 Master's degree	CO Excellent preparation
4. Specialist degree (e.g., Ed.S.)	1 Good preparation
5 Professional degree to g medicine fac theology)	148 - 2 Adequate preparation
-6 Doctoral degree (e.g. Ph.D. Ed.D. D.B.A.)	3 Inadequate properation
-6 Doctoral degree g Thite (4.0) Disks	4 Does not apply
. Hase you taken any licensing or certification examination	The treatment of the
related to year major or area of study at our college/	
p-0. Yes, I have taken and passed an exam	18. Did you transfer any credits from a ar college toward
1. Yes, I have taken in exam but do not <b>yet know</b>	voor additional college work?
the results	O Yes
2 Yes, "have taken an exam but did not pass	(a) > 1. No. Edid not try to transfer any credits
* No, I have not taken any exams, but plan to do so	<ul> <li>* Said fried but they were not accepted.</li> </ul>
4. No, and I do not plan to take <b>an</b> y	
3. Since completing your program at our college, have you	
enrolleri at another college?	<ol> <li>Are you currently employed?</li> <li>O Yes Thave, full time job outside of the borne.</li> </ol>
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1 A public four year college	
2 A private college or university	
3. A vocational/technical school: hospital school of	to Sena Gook at List B: Occupational Title agains abora
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21. Niter completing your program at our college, how long did you look for work before obtaining your first job?  O Had a job which continued after Completed my program.  1. C brained a job just prior to graduation.  2. Less than two months after graduation.  3. Two to three months after graduation.  4. Four to eight months after graduation.	24. How well did our college prepare you for your first job?  1 Cood preparation 1 Cood preparation 1 Inadequate preparation 1 Inadequate preparation 2 Adequate preparation 3 Inadequate preparation 4 Soft applicable? Proceeding of the clated to your major or area of study at our college?  1 Objectly related 2 Soft related 2 Soft related 2 Soft related 2 If you currently are not employed or are not working in a job related to your major or area of study at our college, which of the following applies?  1 Inever looked for work related to my major or area of study 1 Ilooked for work related to my major or area of study but could not find any				
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4 Newspaper advertisement 5 Direct application to employer 6 Friends or relatives -7 Other					
2 \$6 000 to \$8 909 per year 3 \$9,000 to \$11,909 per year 4 \$2,2000 to \$14,909 per year 5 \$15 c *0 to \$17,909 per year 6 \$18,000 c \$20,909 per year 7 \$21,000 to \$23,000 per year 8 \$24,000 or more per year	27. Whether you are currently employed or not, would you be willing to move to another community to work majob related to your major or area of study at our college?  159—[0] Yes 159—[1] No				
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## APPENDIX 3

Samples of Local Items



## Samples of Local Items

#### Introduction

The questionnaires developed for SOIS by NCHEMS and the Coilege Board use standardized questions to collect information from students and former students that is of interest to a wide variety of institutions and research problems. Using standardized questionnaires has a number of advantages. The institution conducting the study does not need to develop and field test the basic questions. Forms already printed are available on short notice to meet particularly pressing research needs. The standardized analysis packages that have been prepared reduce significantly the time between data collection and availability of the analysis.

In many situations, however, the researcher must collect and analyze some additional information unique to the local situation. Many times, such information cannot be accommodated through the items on the standardized questionnaires. In recognition of this, the SOIS forms have been designed to permit the institution conducting the study to add a number of local items to the standardized formats. A maximum of 15 items can be added to each questionnaire in the series that is to be processed through the questionnaire-analysis service. Institutions that make local modifications to the standard questionnaires or that plan to process the completed questionnaires locally may add as many local questions as they wish.



## COMMUNICATING LOCAL QUESTIONS TO STUDENTS

If local items are to be added, most institutions will want to print their local questions on a separate sheet and attach it to the questionnaire. There are also two other possibilities for adding local options. First, the back of the cover letter could be used, if the number of local items is small. Of course, comprehensible instructions must be given in the cover letter. A second option is adding local questions, if space permits, by actually "overprinting" them at the end of the standard SOIS questionnaire.

To be processed by the SOIS questionnaire-analysis service, the locally added items must have response values ranging from 0 to 9. Local questions must be consecutive, and there must be clear instructions for the respondent. (Some institutions ask the question and follow it with "Select the number of the response below which best describes your answer to this question and enter it in the appropriate box on the questionnaire.")

### SAMPLE LOCAL ITEMS

Naturally, if local questions are to be asked, their design and format should reflect particular local needs. The following suggestions are intended to demonstrate the kinds of local questions that other researchers have used and may help stimulate ideas about how this aspect of SOIS might be used.

#### Overlapping Questions

While the same question is always phrased in the same way, not every question is on every form. A local researcher might, wish to examine side-by-side each of the questionnaires in the SOIS series (whether all will be used or not), to see if there are items on one questionnaire that might be usefully added to another for local purposes. The Entering-Student Questionnaire, for example, asks if the student had enrolled previously at any postsecondary institution. That question is not included on the Continuing-Student Questionnaire. An institution might wish to know which of its continuing students came from some other postsecondary institution. The item from the Entering-Student Questionnaire might be modified for the Continuing-Student form either to elicit a simple yes/no response to the question "Have you attended any other postsecondary educational institution?" or to collect information about the specific kind of prior institution (public two-year college, public four-year college, university).

Similarly, a local question might be added to the Continuing-, Former-, a. d Program-Completer/Graduating-Student questionnaires asking if respondents had applied for financial aid, what their primary occupation/employment status is or had been, or whether this was their first-choice institution. This kind of overlap may be particularly important to an institution that is not conducting longitudinal studies or that lacks the capatility to match questionnaire responses with master-file information.



### LOCATER QUESTIONS

An institution may be interested in specific information about where its students previously have lived. For institutions with a local service area, the information may identify the specific geographic location or the specific "feeder school." For those with a broader service area, it may be phrased as a question of distance or of location. Some possible kinds of questions are:

At which of the following schools or colleges were you last enrolled? What is the zip code of your permanent residence? What is the distance of your permanent residence from campus? In which of the following state/regions is your permanent residence located?

A multi-campus institution that has not otherwise coded its questionnaires probably would want to add a local question asking respondents to indicate campuses at which they either currently or eventually intended to enroll.

#### MOBILITY QUESTIONS

Some institutions may be interested not only in the areas—students have lived and their current local and permanent residences, but also in their students reside or plan to reside once they leave the college; institutions may also want to know how mobile students are after graduation. For institutions interested in such information, the following kinds of questions might be helpful:

While you were a	ittending our college, were you a legal resident of the
state of	<u> </u>
In what state are	you currently residing?
What are your lo	ng-term plans in terms of residence?
in what state is yo	our current job?

#### TRAVEL QUESTIONS

Some institutions, particularly those with parking problems, may want to get information about their students' commute to campus. The following might be asked:

How do you travel from your residence while in school to the campus?

How long does it take you to get from your residence while in school to the campus?

How many days a week do you park a car on campus?

What would you do if the daily charge for parking on campus were raised to \$ \_\_\_\_?



If the campus instituted a shuttle bus service from \_\_\_\_\_ to \_\_\_\_\_ to \_\_\_\_\_ how many times a week would you use it?

If the metropolitan transit district carries through with its plans to increase fares to \$\_\_\_\_\_, what will you do about travel to and from campus?

#### FINANCIAL QUESTIONS

Other than asking en ering students if they plan to apply for financial and, the SOIS questionnaires do not inquire about the financial plans, resources, costs, or other financial problems of students. Some institutions may wish to collect this information in the SOIS surveys, although there are other standardized questionnaires designed specifically for these purposes. (Those interested in in-depth research into financial areas should review the 1976 College Board publication, A Guide to Student Aid Research: Using the Student Resource Survey and Student Expense Study Service.) The investigation may deal with family financial background, current expenses, or pattern of financing. Accurate estimates can be determined, depending on the level of complexity and number of local questions added.

An approximate determination of a student's academic background could be obtained from a question like:

How would vou describe your parents' financial situation?

A more precise determination would require the student to respond to a range of specific options about parental income:

Which of the following intervals best describes your parents' income last year? Be sure to include their total annual income from all sources (such as salary and wages, pensions, interest and dividends, public assistance).

Similarly, students' dependency status could be determined by a simple yes/no response to "Are you dependent on your parents for financial support?" For more specific information, questionnaires should include questions that ask about students' places of residence for the last three years, whether they had been claimed as dependents for federal income-tax purposes, and how much money they had received from parents or guardians.

Other areas of financing can be examined simply or in detail. Students may be asked "What would you estimate to be the total cost of a year's education for you at this institution?" or "How much do you spend each year on each of the following items?" Financing patterns may be determined from a simple "Check each of the following sources that you used to finance your education here" or "Which interval describes the amount you actually received from each of the following sources during the 19\_\_\_\_\_ academic year?"



Some institutions might be interested in investigating the behavior of students or their reactions to alternative methods of financing their educations. The following might be included:

What is the highest amount of tuition you think you would be willing to pay for the program in which you are enrolled?

What would be your response if tuition were increased to \$\_\_\_\_?

How much money would you be willing to borrow to finance your education at this institution?

How would you prefer to repay money borro and to finance your education?

There are a variety of simple and complex questions about financing an education that might be considered. Most campuses have a director of financial aid who is experienced and knowledgeable of the kinds of issues and problems involved in studies of financing patterns. It might be well to involve that person in the survey planning process if this area is to be investigated.

#### Information Availability and Quality

Particularly with entering students, an institution may want to evaluate the amount and/or quality of information that the student has. It may be information about the institution itself or about the student's future. Some of the kinds of questions that might be asked are:

How easy was it for you to get the information you needed to apply for admission?

How would you rate the quality and quantity of information you received about the costs and financial aid available at this institution?

How would you rate the information that you have received from this institution about opportunities for employment in your major field following graduation?

The institution might also be interested in the kind of poor information, guidance, and counseling the student had received:

How would you rate the quality and quantity of information you received in high school about the various opportunities for post-secondary education?

How would you rate the vocational counseling you received in high school?



#### EDUCATIONAL SATISFACTION QUESTIONS

Many faculty, administrators, students, and constituents are interested in how students feel about the quality of their educational experiences and whether they are satisfied with the contribution the college has made to growth and development in certain areas. In trying to obtain such information, it is worthwhile initially to gain some understanding about how students value a college education in general, and then ask students questions about the extent of their satisfaction in nore specific areas of growth and development. For instance, the following series of questions might be initially asked of students:

In general, how well do you like attending college?

If you could start over again, would you still choose to attend our college?

Regardless of any vocational benefit college may have for you at this point in time, do you think that being in college is an important and beneficial experience?

This initial series of questions could be followed by a second series of satisfaction questions concerning the extent to which students' experiences at this college contributed to their progress in areas such as vocational preparation, critical thinking, human relations, and verbal and written communication skills.

#### OTHER LOCAL QUESTIONS

The list of kinds of questions that a particular institution might wish to add to the standard SOIS questionnaires potentially can be as long as the number of institutions using the questionnaires and the groups of students they will be surveying. As NCHEMS and the College Board gain experience in helping institutions develop local items to be alded to the standard SOIS questionnaires, an inventory of local items will be created and made available so that future users of the SOIS questionnaires will not have to start from scratch.





## Sample Reports from Student-Outcomes Assessment Surveys

#### Introduction

The NCHEMS-College Board SOIS questionnaires were developed over a three-year period. Versions quite similar to those currently available were field tested by four two-year and four four-year institutions during 1977 and 1978. The reports included here are drawn from actual data collected by those field-test institutions, although their identities have been disguised. In some cases, the questions and responses do not correspond exactly with the versions of the SOIS questionnaires currently available because of modifications made after the field-test experience.

The first two samples are intended to show how results of the surveys could be summarized for senior administrators or governing boards. They present highlights only. The third shows how survey results could be used to address a particular problem area. The fourth shows how the complete survey results could be documented as a reference for a variety of campus offices and officers.

These sample reports are intended to illustrate and to suggest ways in which institutions could use the outputs of SOIS surveys. Reports that result from use in the SOIS series also will be made available.



## SAMPLE 1

A Summary Report for Governing Boards or Senior Administrators



## Brookdale College As Entering Students See It

A Report to the Trustees

Prepared by

L.J. Walter

#### Introduction

Throughout its history, Brookdale College has collected voluminous information from its students. Substantially all of the collection, however, was information needed by the College for its own administrative purposes. Seldom were students asked in any systematic way why they had come, what they expected to receive and how they believed the College experience had benefited them when they left. The students' point-of-view was considered infrequently and only when some real or potential crisis encouraged administrators to seek it out.

The appointment by the Board of Trustees of President Nelson in 1977 changed that. One of his first acts was to establish a new research office charged with the responsibility of developing a complete data base about the College's student body. This report is the first of a series growing out of the development of that data base.

An advisory committee was convened in the fall of 1977 to outline the kinds of information the College should have from and about its students. Included were representatives of the admissions office, the financial-aid office, the faculty, and students. In the initial meetings of the committee, it became evident that a number of questions would need to be addressed. Among them were what students expected to get from the College, how they found out about it, what their actual experiences were, why they left, and what happened to them after they left.

The advisory committee's initial inclination was to develop questionnaires that could be administered to different groups of students to obtain the needed data.



An analysis of the time and expense required to develop and test multiple instruments indicated that such a course of action would be unreasonable. Further, the committee was concerned about its ability to compare findings at the College with those of other similar institutions. Locally developed questionnaires would have made this difficult. Further, it did not appear that the College had the computer capability to perform particularly sophisticated analyses of the desired data.

Fortunately, the committee became aware of the Student-Outcomes Information Services (SOIS) made available by the National Center for Higher Education Management Systems (NCHEMS) and the College Board. SOIS provided a series of questionnaires addressed to different groups of students, collected information relevant to the issues that the advisory group wanted to address, and had a predesigned computer-analysis system that provided the kinds of displays needed. Participating in SOIS also was considerably less costly than developing the instruments and analysis procedures locally. In addition, NCHEMS and the College Board would assist in the design and conduct of the study. President Nelson authorized the use of SOIS in our student-outcomes studies.

SOIS includes questionnaires for newly admitted entering students, students who have previously enrolled at the College and are continuing their educations, students who have left without completing their formal programs, graduating students, and alumni. The first two questionnaires have been administered; the other three will be administered during the current year. This report describes some of the findings of the survey of entering students. At your next meeting, you will receive a report describing some of the findings from the survey of continuing students.

In addition to providing information directly relevant to the investigation into enrollment patterns at the College, the SOIS questionnaires produced a wealth of information that will help the College in other ways. Special reports have been prepared for the deans of each of the faculties, for the dean of Student Services, and for the director of Fiscal Planning. We anticipate that during the year—and years—to come, we will find ourselves returning to the SOIS analyses for the answers to additional questions.

#### STUDY METHODOLOGY

Questionnaires were mailed during the spring and summer to every student offered admission. To avoid confusion with the materials to be completed and returned to the admissions office, the SOIS Entering-Student Questionnaire was mailed separately one week after the offer of admission. A cover letter signed by President Nelson informed the students of the reasons for the survey, assured them of the confidentiality of their responses, and urged their cooperation. Responses were requested within 10 days. Of the 2,048 students offered admission, 52.9 percent (1,083) responded to the initial mailing. A follow-up letter with a second copy of the questionnaire was sent two weeks after the initial response period expired.

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This produced an additional 486 responses. The final study group included 1,569 entering students, or 76.6 percent of those offered admission for Fall 1978. We believe that this respondent group is sufficiently large to permit recommendations to be made with confidence that they represent what would have been found if all entering students had responded.

#### GENERAL CHARACTERISTICS OF THE RESPONDENTS

Nearly 6 in 10 of the respondents (58.5 percent) were women. Nearly 6 in 10 (58.3 percent) indicated that they would describe themselves as white or Caucasian. Students who would describe themselves as black or Afro-American constituted the largest racial/ethnic minority group, with 35.8 percent of the respondents saying one of those terms would best describe themselves. All other racial/ethnic groups made up just under 6 percent of the respondents. The average age of the respondents was just under 26 years. The women were slightly older than the men (the respective average ages were 26.4 and 25.2 years); the white students were slightly older than the nonwhite (26.3 years and 25.4 years, respectively).

Slightly over 4 in 10 respondents (41.7 percent) planned to major in Arts and Sciences; 35.6 percent in Business Administration; 15.1 percent in Engineering; and the remaining 7.6 percent, Education. About a third (33.6 percent) indicated that they had some prior work experience in their intended major field.

The average family income of the respondent group was \$13,872. Nonwhite students came from families with significantly lower mean income (\$9,430) than did white students (for whom the average was \$17,050). More than one-third (35.6 percent) of the nonwhite students came from families with incomes of less than \$6,000, as compared with only 9.1 percent of the white students. More than half of the respondents were employed, 40.9 percent more than half-time and 12.7 percent less than half-time. White students were more likely to be working than were nonwhites (66.4 percent compared to 35.9 percent). In view of their low family income and greater level of unemply yment, it is not surprising that nearly 6 in 10 (59.1 percent) of the nonwhite students indicated that they had some concern about finances. Only about 3 in 10 (31.9 percent) of the white students said they would have any concern about finances.

#### What Are They Looking for?

A substantial portion of the information collected from the entering students related to what they wanted to get out of their experience at the College—what were their goals? For most, the goals were serious and related to their future activities. More than 6 in 10 (60.2 percent) said that they had come to prepare for a new career. Slightly fewer (56.2 percent) said their goal was to obtain a degree or certificate. Just under half of the respondents (49.2 percent) said that long-range career development was one of their goals.



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The next most frequently reported goal had to do with self-improvement of a more personal nature. Just under half (47.6 percent) of the respondents said that one of their goals was to learn skills that will help them enrich their daily lives and become more complete persons. Improvement in self-confidence was the next most frequently cited goal, reported by 43.6 percent of all the respondents.

Other goals cited by smaller percentages of the entering students included seeking a way to improve their lifestyle, 39.5 percent; meeting people, 37.7 percent; gerting courses needed to transfer to another institution, 35.7 percent; learning how to better get along with other 131.9 percent; improving leadership skills, 25.7 percent; improving skills for a content job, 25.2 percent; discovery of vocational interest, 24.3 percent; getting a raise or promotion, 19.6 percent; increased participation in cultural activities, 18.8 percent; and more opportunity for social activity, 14.3 percent.

Table 1 shows the percentage of entering students who said that they had particular goals in mind when they came to the College.

TABLE 1

Goals of Students Entering Brookdale College
Fall 1978

GOAL.	PERCENT OF RESPONDENTS			
Prepare for a new career	60.2			
Obtain a degree or certificate	56.2			
Long-range career development	49.2			
Skills to enrich life	47.5			
Improved self-confidence	43.6			
Improved lifestyle	39.5			
Meet people	37.7			
Obtain credits to transfer elsewhere	35.7			
Learn to get along better with others	31.9			
Improve leadership skills	25.7			
Improve skills used on current job	25.2			
Discover vocational interests	24.3			
Get a raise or promotion	19.6			
Participate in cultural and social activities	18.8			

These data show that students at the College typically have as one of their goals for attending a desire to prepare for the post-collegiate world, rather than simple self-improvement or social/cultural participation. The most common goals relate to career advancement and career preparation. Participating in social or cultural activities appears to be less important to the College's entering students.



#### WHY DO THEY COME HERE?

There are more than 2,000 accredited degree-granting colleges and universities in the United States. There are more than 60 in this state. There are 12 within reasonable commuting distance of the College. Presumably among this selection of institutions there are a number at which students could achieve the goals they set for themselves in enrolling in postsecondary education. Why, then, would they choose this college?

Our entering students were asked to respond to a variety of different aspects of the College and to indicate how important an influence each was in the decision to enroll here. Their responses say much for the image that the College projects to potential students. The most frequently reported aspect of the College influencing the enrollment decision was the range of courses available. Nearly 8 out of 10 (78.6 percent) said that influenced their decision. The next most important reason was that students viewed the College as "convenient to attend." Over 7 in 10 (72.0 percent) of the entering students said this was an influence on their decision to attend. The next most important reason was a perception that the College was low cost, with just under 7 in 10 (69.6 percent) citing that as an influence.

TABLE 2
Factors Influencing Decisions to Attend

FACTOR	PERCENT OF RESPONDENTS			
Course offerings	78.6			
Convenient to atter d	72.0			
Low cost	69,6			
Academic reputation	66,6			
Can work while attending	61.6			
Can live at home while attending	50.9			
Range of student services	> i.4			
Identify with fellow students	18.4			

Three other reasons were cited as influencing the decisions of more than half of the entering students: the College's academic reputation (66.6 percent), the ability to work while attending classes (61.6 percent), and the ability to live at home (50.9 percent). About one-third (34.4 percent) said that the range of student services was important; less than 2 in 10 (18.4 percent) said that friends attending the College influenced their decision to enroll.

In addition to describing why the entering students come here, table 2 provides a capsule description of the image that the College projects to potential students. We are seen as a place that is accessible, affordable, with a good range of courses and a solid academic record. Some of the less frequently named reasons may be



duplications of some of the more frequent. For example, it may be convenient to attend because the student can work or live at home while enrolled. So too the ability to live at home may be one reason why low cost is an important influence to so many students. Clearly, however, student services and friends attending the College are not serious influences on student choice.

It should be remembered that the list of factors to which the entering students were asked to respond was close-end rather than fill-in. This is unlikely to change the high influence reported for such factors as available courses and low cost. It does not guarantee, however, that there are other "image" factors important to students but not found on the listing on the questionnaire.

#### How Do They Find Out about Us?

In addition to describing what students are seeking in postsecondary education in general and what elements of the College's image they think will help them reach those goals, the survey shed light on how students find our about this institution. The source of information most frequently cited by entering students was a teacher or friend. Nearly 6 out of 10 (57.1 percent) said that information from this source was important in their decision to enroll. The next most frequently cited source of information was former students. Nearly 4 out of 10 (38.5 percent) got information about the College from our alumni. Other important sources of information were our catalog. 27.6 percent; mailings from the College, 28.2 percent; and material in the newspaper, 13.8 percent. Radio and TV advertising and stories were a source for 12.2 percent, while displays that the College set up at supermarkets and fairs were a source for 7.6 percent.

Three other "people" sources provided information to some students. Employer recommendations were cited by 13.6 percent of our entering students, information from a guidance counselor by 13.5 percent, and information obtained from a representatile of the College by 5.2 percent. It is interesting that the two sources traditionally seen as having the most direct input to potential students—guidance counselors and college-admissions officers—were the two least frequently cited individuals providing information to our entering students.

The information in talle 3 indicates then, that teachers, individuals in the community, and former students are important sources of information about the College to our prospective students. This suggests that we should broaden our focus of information dissemination to assure that the general public knows our story, rather than focusing narrowly on high-school guidance counselors.

Table 3 also provides insights into the ways in which we might market our image. The importance of our catalog (a frequently undervalued marketing device) and direct mailings in licates that our prospective students are influenced by what they read in materials that the College sends to them. The lower importance attached to newspaper, radio, and TV coverage suggests that what other media sources say about the College has less influence on student decisions.



#### TABLE 3

#### Sources of Information about the College Important to Entering Students

SOURCE OF INFORMATION	PERCENT OF RESPONDENTS		
Peop. in the high school	57.1		
Friends or acquaintances	38.5		
College catalog	37.6		
Information received in the mail	18.2		
Information from the newspaper	13.8		
College placement service	13.6		
People at another college	13.5		
Radio or TV	12.2		
Displays at shopping centers, fairs	7.6		
College representative	5.2		

And finally, table 3 shows that the traditional method of disseminating infornation about colleges and universities—a college representative talking to or arough a high-school guidance counselor—might well be re-examined. Direct nailing and distributions content of example and distributions content on the catalog are less expensive ways of reaching respective students than are the one-on-one meetings. The College might better pend its recruiting budget in the development of more and better direct-mail ampaigns than in sending recruiters out to find students.

#### UMMARY

This report presents some of the findings of a survey conducted by the College sing the Entering-Student Questionnaire of the Student-Outcomes Information services (SOIS) made available by NCHEAS and the College Board. It includes esponses received from 76.6 percent of the students entering in the fall of 1978. The data from these students indicate that:

- 1. Students come to the College first, to prepare for their future career; second, for reasons relating to self-improvement; and third, for reasons relating to current job or social factors.
- 2. Students see the College as providing them with a desirable range of courses in a low-cost, convenient setting.
- 3. Prospective students rely heavily on information from teachers, friends, and former students in the community in deciding whether to come to the College. Information from our admissions-office representatives appears to be considerably less important.



The survey results include considerably more information than is presented here. Separate and special reports have been prepared for different officers and offices at the College. In the future, additional reports will be prepared for the trustees.



### SAMPLE 2

A Summary Report for Governing Boards or Senior Administrators



# Executive Summary Fairview Community College Attrition Survey

During July of 1977, 2,560 students at Fairview Community Coilege (FCC) who had failed to return for at least one quarter during the 1976-77 academic year were sent a questionnaire. The questionnaire inquired about students' reasons for not returning, satisfaction with various experiences at FCC, present and future plans, and background and demographic information. The study was conducted using the Former-Student Questionnaire developed by the National Center for Higher Education Management Systems and the College Board as part of their Student-Outcomes Information Services. After a follow-up mailing in September, 825 usable questionnaires were received for an adjusted response rate of 38 percent. The 825 respondents were divided into three categories: 8 percent were seeking a certificate from the college when they left, 20 percent were seeking an associate degree, and 70 percent were not seeking a degree or certificate.

#### BACKGROUND DEMOGRAPHIC DATA

- 1. Almost all respondents (94 percent) were Colorado residents
- 2. Respondents ranged in age from under 18 to 65 with a median age range of 20 to 30 years
- 3. Sixty-one percent of the respondents viere female and 39 percent, male
- 4. Almost all respondents were white (94 percent)
- 5. Almost two-thirds of respondents (66 percent) had a high-school diploma as their highest degree



Overall, about one-third of respondents were enrolled one academic term or less before leaving; almost half were enrolled one year, and the remainder were enrolled longer. Grade point averages were high (£.01 to 4.00) with 8 percent in each category of respondents below a "C" (2.0). In all categories of respondents, the majority were part-time students during their attendance at FCC. Correspondingly, the bulk of respondents were employed while at FCC. Large percentages in all groups were employed full-time (36 or more hours per week). Most respondents were not receiving financial aid.

Slightly more than 60 percent of those seeking an associate degree were enrolled primarily to complete courses that would transfer to another college. Other important goals identified by associate-degree seekers attending FCC were: increasing knowledge and understanding in an academic field, obtaining a degree or certificate, formulating long-term career plans, and learning skills to enrich their daily life. Certificate seekers, on the other hand, identified the improvement of knowledge, skills, and competencies for their jobs and the increase in knowledge and understanding in an academic field as the two most important goals they wished to achieve at FCC. Other important reasons for attending included the completion of courses necessary to transfer to another school and the improvement of chances for a raise and/or promotion. Those not seeking eit for a degree or a certificate most frequently indicated their important goals to be the upgrading of job-related knowledge and skills (32 percent), personal enrichment (27 percent), and an increase in knowledge and understanding in an academic field (25 percent).

#### REASONS GIVEN FOR LEAVING

The three most important reasons to respondents for leaving Fairview were: conflict between job and studies, lack of money, and other responsibilities too great. For those not seeking a degree or certificate, two other reasons frequently mentioned were fulfilling academic and personal goals and accepting a new job. Those seeking a certificate or associate degree cited the need for a temporary break from studies as another important reason for leaving the college. Certificate seekers also frequently mentioned personal problems as a reason for not returning, and associate-degree seekers ranked dissatisfaction with specific aspects of FCC as the fourth most important reason for leaving.

#### **EVALUATION OF FCC SERVICES**

Respondents were asked to evaluate the various services offered by the College in terms of their awareness of a particular service, their use of it, and their satisfaction. In general, most of the respondents were aware of the specific services offered by the College. Almost all of the respondents (over 90 percent) who used a particular service were satisfied with it, with the exception of



registration (67 percent satisfied), college cultural programs (71 percent satisfied), inancial-aid opportunities (74 percent satisfied), and employment opportunities 74 percent satisfied).

## **CURRENT PLANS OF FCC FORMER STUDENTS**

slightly more than half of the respondents planned to either reenroll at FCC or inroll at another college. Of those not planning to return to school in the near uture, almost two-thirds were working, 9 percent were looking for a job, and !! percent were caring for home and family.!

This latter information is Sword ( ) one of the local drops adde for the worldard Lember Stadent space on matrix



## SAMPLE 3

A Report Addressed to a Particular Problem Area TO: Members of the Inter-Campus Committee on Articulation

FROM: R. Lovell, Director of Admissions

SUBJECT: Review of Current Information Services for Prospective Students

DATE: November 9, 1978

When President Nelson created our committee last year, he charged us with a review of the current methods of communicating information about the College to prospective students with the view of determining whether different groups of students or different campuses would benefit from different kinds of information-dissemination techniques. He was particularly concerned about the ways in which we try to reach "under-represented" groups.

At the last Trustees' meeting, Senior Fellow Walter presented information from the Entering-Student Questionnaire we administered through the NCHEMS-College Board Student-Outcome: Information Services (SOIS). His report provided some information about how the total group of respondents viewed the different information-disse anation activities of the College. He further indicated that my office had been provided with detailed analyses of the responses of our students to individual items. This memorandum provides a more detailed look at our information-dissemination activities.

You will remember that we sent SOIS Entering-Student Questionnaires to all students offered admission for the fall 1978 semester. Of the 2,048 offers we extended, 1,569 students completed and returned the questionnaires. That represented 76.6 percent of the total group. We anticipate further surveys of enrolled students, students who leave without completing their programs, and graduating students will be conducted during this year—providing us with information that will help us better understand student decisionmaking. For now, we need to focus on the information from the entering students as we make plans for our "campaign" for new students for the fall of 1979.



The "Walter Report" to the Trustees showed that students said that they had used the following sources (in rank order of reported frequency) in learning about the College: people in the high school (57.1 percent), friends or acquaintances (38.5 percent), the College catalog (37.6 percent), information received in the mail (18.2 percent), information in the newspaper (13.8 percent), a college-placement service or educational-information service (13.6 percent), people at another college (13.6 percent), radio or TV advertisements (12.2 percent), displays at shopping centers and fairs (7.6 percent), and a representative of the College (5.2 percent).

Table 1 examines the use of those sources of information by different subgroup "target" populations of the College's articulation efforts. It reveals that our students are far from monolithic, at least in their use of information sources.

Nonwhite students are considerably more likely to rely on advice from people in their high school than are white students. More than two-thirds (67.4 percent) of the former group reported using a high-school source compared with only half (50.6 percent) of the latter group. This perhaps is a reflection of our efforts at "generalized recruiting" in the inner-city high schools and the encouragement that nonwhite students, who are represented in those schools in high percentages, receive from the "you-can-make-it" campaign. The only slight differences in use of information received in the mail suggests that our attempts to target our direct-mail campaign to what we think are student characteristics and interests have not been a great success.

It is perhaps encouraging to note that nonwhite students were somewhat more likely to have received information from a representative of the College than were white students, but the generally low rate reported for use of the college representatives suggests that we might re-direct our efforts in that regard. Radio or TV seems to be a more efficient way of reaching students, regardless of racial/ethnic group, than does the college recruiter.

When students of different ages are considered, no clear pattern of information usage emerges. As would be expected, older students make less use of information sources in the high school than do younger students, but the differences are smaller than might have been expected. Older students also make less use of information received from triends than do younger students. That perhaps is contrary to what might be expected. Even more contrary to what might be expected is the relatively low use made of college-placement services by older students. The establishment of the local community-education information centers last spring presumably would have made more information resources available to out-of-school adults. If that has happened, it is not reflected in the responses of our entering students.

Homemakers seeking to return to school have been a particular target of the College over the past few years. Consequently, their information sources are of particular interest. In our current entering class, the people who characterized themselves as homemakers gave responses that were not very different from the total group or from the students under 21 years of age. Homemakers placed slightly



TABLE 1

Sources of Information Used by Entering Students:

Total Population and Different Target Groups

SOURCE OF INFORMATION	TOTAL GROUP	RACIALIETHNIC		AGE			HOMEMAKERS
		White	Nonwhite	Under 21	21-24	25 & Over	
People in the high school	57.1%	50.6%	67.4%	61.6%	56.0%	53.6%	60.3%
Friends or acquaintances	38.5	41.2	35.5	44.2	37.5	34.3	35.3
College catalog	37.7	35.8	40.6	39.5	38.8	35.3	42.1
Information in the mail	18.2	17.4	18.9	21.5	16.7	16.5	18.6
Information in the newspaper	13.8	12.4	15.9	13.4	11.3	15.5	18.1
College placement service	13.6	15.7	13.0	24.3	9.7	5.4	11.8
People at another college	13.5	11.1	17.2	12.6	15.4	13.5	6.4
Radio or TV	12.2	9.9	15.7	13.6	11.0	11.5	12.3
Displays	7.6	6.5	9.0	9.3	6.0	7.1	9.8
College representatives	5.2	4.2	ľ'ù	8.4	4.0	2.3	5.2



higher reliance on people in the high school, the College catalog, and newspaper information than did the total population. They reported slightly less reliance on friends or acquaintances, the educational-information centers, and people at other colleges.

Of particular interest is the only marginally higher percentage of homemakers, as compared with the total group, who reported receiving information from the displays we had set up at shopping centers, fairs, and community centers. We had assumed that these would be good "initial contact" places for homemakers. That assumption may need to be reevaluated.

Table 2 shows separately the responses of students entering each of the College's three campuses this fall. In many respects, these data reflect differences shown on table 1. Students at the Center campus were considerably more likely to use information from people in their high schools than were students at either of the other two campuses. Again, this may reflect our special campaigns in the inner-city high schools from which Center draws most heavily. Students at the South campus were interestingly less likely to rely on the community educational-information center than were those at Center. That perhaps indicates some problem with the center branch in that community.

TABLE 2

Source of Information Used by Entering Students:
D. Feeffnt Campuse.

SOURCE OF INFORMATION	NORTH CAMPUS	SOUTH CAMPUS	CENTER CAMPUS
People in the high school	45,5%	53.0%	65.1%
Friends or acquain ances	39.0	40.6	34.9
College catalog	39.1	39.8	39.3
Information in the mail	18.3	20.2	20.3
Information in the newspaper	8.8	16.2	17.1
College placement service	13.0	8.7	17.1
People at another college	13.0	13.0	11.7
Radio or TV	10.0	12.7	1-,1
Displays	8,9	8.7	8.5
College representative	5.4	4.2	6.8

Students at the South and Center campuses were more likely to get information from the media than were students at North. Nearly twice as large percentages of students at South and Center reported getting information from the newspaper

than was true at North; about 50 percent more Center students reported using information from radio or TV than at North.

As in other analyses, the good old college representative runs dead last at all campuses.

't hese analyses must be tentative until confirmed through additional years' survey data. They do provide, however, a basis upon which we can do some more in-depth study of our own activities. I draw the following tentative conclusions from the data and urge you to consider them prior to our next meeting:

- 1. Regardless of the target population, the secondary school remains the information source used by the largest groups of potential entering students. We should consider expanding our high-school relations efforts, particularly through extending the "you-can-make-it" campaign beyond the inner-city schools.
- 2. Friends and acquaintances (who may or may not be our former students) are a very important information source toward which we currently direct little attention. We should seek out ways to utilize this information source more.
- 3. While we had downplayed our catalog as a recruiting device in favor of more direct mail/media activities, potential students still find it a very important information resource. We need to re-emphasize the catalog.
- 4. Media appear to be a more effective way of reaching students than do individual college representative visits. We should reassess the proportion of resources directed to each kind of activity to see if we can make more productive use of our limited resources.

The admissions office at each of the campuses has been provided with a copy of the analysis of the SOIS Er ering-Student Questionnaire. This will give you an opportunity to review in more detail the responses of the total group and students at your individual campus. I will appreciate any findings that you identify from those reviews that would shed additional light on our information services and needs.



# SAMPLE 4

Complete Decumentation of Survey Findings



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# The Fairview Community College Attrition Study, 1977:

#### I. INTRODUCTION

For some time, the faculty, administrators, and trustees at Fairview Community College (FCC) have expressed concern about (1) the number of students (both full-time and part-time) who leave the College without completing their degree and certificate requirements and (2) the paucity of information regarding their reasons for leaving and their feelings about the College and the programs and services it provides. As a result of this concern, President Nelson decided to undertake an attrition study at FCC. The purpose of this document is to report the findings of the ready.

The Fairview Community College Attrition Study was conducted on the total population of 2,560 students who failed to return to the College in at least one of the three quarters during the academic year 1976/1977. An initial mailing was sent to the 2,560 students on July 25, 1977, and a follow-up mailing was sent to all those who had not yet responded on September 10, 1977. The total number of returned, usable questic nnaires was 825 for an adjusted response rate of 38.3 percent.



<sup>1.</sup> This sample report is based on the results of an attrition study condocted by NCHEMS at one of four pilot-test schoolthat participated in the NCHEMS Information About Students project. This project, which was one of NCHEMS pioneering efforts concerned with student-outcomes data collection and use, was designed to develop my stalls and procedures for conducting attrition studies in postsecondary institutions.

This report of the survey results is divided into three major sections. Section I describes the survey-administration procedures and includes discussions of response bias and response rate. Section II presents the results of the study in narrative and tabular form. Section III is a summary of the major results of the survey.

#### II. Survey-Administration Procedures

The Questionnaires and Cover Letters. The sur, projection questionnaire (shown in the appendix) was developed jointly by the National Center for Higher Education Management Systems (NCHEMS) and the College Board, and it is one of a series of student-outcomes questionnaires in the NCHEMS-College Board Student-comes Information Services (SOIS). An initial-mailing cover letter was developed and printed. The follow-up mailing cover letter used in the survey consisted of a copy of the original cover letter with a brief handwritten note urging students to return completed questionnaires.

Other necessary materials for the survey included mailing envelopes and return envelopes (printed with bulk-rate mailing permits).

The Sample: The sample of 2,560 nonreturning students was identified by Fairview staff by a computerized search of institutional records for any student who had failed to reenroll for one of the three quarters during the academic year 1976/77 (excluding these who had completed a program).

On July 25, 1977, 2,560 questionnaires, cover letters, and return envelopes were mailed to the total sample of nonreturning students. On September 10, 1977, a follow-up mailing (which included a duplicate of all materials) was sent to all students who had not yet responded.

Table 1 shows the final distribution of questionnaires for the mailing sample of 2,560 students:

TABLE 1
and the second
Final Distribution of Questionnaires

N		CATEGORY
825	32.2	Returned, usable questionnaires
56	2.2	Returned, unusable questionnaires (for example, student graduated from degree program)
261	10.2.	Questionnaires returned by postal service as undeliverable
1.418	55.4	No response .
2,560	0.001	TOTAL



Thus the unadjusted response rate was 32.2 percent. An adjusted response rate is calculated as 38.3 percent when the undeliverable and unusable questionnaires are considered.<sup>2</sup>

Response Bias. Response bias is the tendency for those who choose to respond to a survey to differ systematically from those who choose not to respond; this can bias inferences made from the questionnaires. Frequently in attrition studies those who complete and return a questionnaire differ from those who do not in that they are more positive toward the school they left and toward school in general, particularly in studies of four-year colleges or universities. In a community college such as Fairview, however, where many nonreturning students never planned to complete a degree or certificate, it is not as likely (as in four-year colleges) that not returning for a particular school quarter is a sign of a negative attitude toward the school itself or the educational process. It is also not as likely, therefore, that in a community college those who choose to respond will be more positive in attitude than those who don't. This does not suggest there are no differences between the 825 who did respond and the 1,418 who did not; it does suggest that any existing bias between the two groups is not particularly clear simply from trying to guess why students complete and return a questionnaire. The reader should bear in mind when reading this report that conclusions and inferences are based on the three-eighths of the sample who chose to respond, and to the extent that this group differs from the five-eighths who did not complete a questionnaire, these conclusions and inferences do not apply to the general or typical nonreturning student at Fairview College.

#### III. Analysis and Results

Questionnaires were analyzed by computing frequencies and percentages of responses for each item and by computing a cross-tabulation between certain items, where appropriate (for example, reasons for leaving by sex). The questionnaire results can be conveniently divided into four categories:

- Background/status information
- Educational goals achieved
- Reasons for leaving
- Evaluation of institutional services
- Current educational plans



<sup>2.</sup> The adjustment was calculated by first subtracting the 264 and probable an essentiality from the base sample of 2,560 resulting in a new base sample of 2,290 students. Then, since 56 of the 881 returns 5 questionnaites to 4 percent) were unusable, the assumption is made that 6.1 gereem of all 2,290 questionnaites probable would have been unusable or 147 students. These 147 stu tents were therefore subtracted from the base of 2,290 resulting in the adjusted base of 2,452 budents. The 825 returned, usable questionnaites divided by the adjusted base of 2,482 questionnaites yielded in adjusted tesponse rate of 38.3 percent.

These decisions of questionnaire information will be discussed, both in terms of the total responding sample of 825 students and separately for three subgroups: students enrolled in a certificate program (N = 65), those enrolled in an associate-degree program (N = 165), and those in neither (N = 574). Since respondents were primarily students who were not seeking a degree or certificate (71 percent), percentages and frequencies for the total sample will be heavily weighted by the responses of the nondegree/noncertificate group.

Background/Status Information. The background and student status information available from the questi innaire included:

- Gender
- Racial/ethnic
- Age
- Marital status
- Handicap status
- Length of time at college
- Highest degree held'
- Degree goal
- Enrollment status while attending
- Employment status while attending
- Number or changes of major<sup>3</sup>
- Major or area of study
- Grade point average
- Applied for financial assistance
- State residence<sup>3</sup>

With exception of major or area of study, table 2 shows the frequencies and percentages of responses to each of the background/demographic items listed above for all respondents and separately for those who were seeking a certificate, an associate degree, or who were not seeking a certificate or degree. Major highlights from these tables are:

- More women than men responded to the survey. For those not seeking a degree, the ratio was two to one; for the degree/certificate seekers, it was 1.5 to 1.
- Respondents ranged in age from under 18 to 61 years or more with a median age range of 26 to 30. In all three subgroups, the 18 to 22 year olds represented the largest category of respondents. The associate-degree seekers had the lowest median age range (23 to 25).
- Almost all respondents were white (94 percent), with little variation across degree categories.



<sup>3.</sup> Highest degree held, number of changes of major, and stare to thence were locally developed items that were added to the SOIS Former-Student Obestionnaire.

- Slightly over half of the respondents were not married (52.8 percent). Only in the "Neither" category were there more respondents who were married (56.3 percent) when they attended Fairview Community College than those who were not married (43.7 percent).
- Slightly over 10 percent of the respondents indicated that they had some type of permanent handicap. Restricted mobility and restricted hearing ranked as the top two permanent handicaps.
- Overall, about one-third (34.6 percent) of the respondents were enrolled for just one term or less before leaving, almost half (47.9 percent) were enrolled one year, and the remainder were enrolled longer. The associate-degree seekers were somewhat different in that only 20 percent were enrolled for one term or less, while 39 percent left after one year, 25 percent in two years, and 15 percent had been enrolled more than two years.
- Almost two-thirds of respondents (66 percent) had a high-school diploma as their highest degree. For those seeking an associate degree, however, this proportion rose to more than four-fifths (82 percent).
- The majority of respondents (71.3 percent) were neither seeking a certificate or an associate degree when they attended FCC. Eight percent of the respondents were seeking a certificate and slightly over 20 percent were seeking an associate degree.
- Of both the degree and certificate seekers, 70 percent had never changed major fields of study and very few (3 to 4 percent) had changed majors more than once.
- Over 65 percent of the respondents in each of the three groups had grade point averages above a "C" (2.01 or better). (It should be noted that almost one-third of the respondents did not respond to this item on the questionnaire.)
- There was a fairly equal split in the part-time/full-time status in certificate-seekers (42.6 percent full-time and 57.4 percent part-time) and associate-degree seekers (47.9 percent full-time and 52.1 percent part-time groups). In the group of respondents who-we e not seeking either a certificate or an associate degree, only 12.1 percent were full-time enrollees, while 48.6 percent were part-time students enrolled for credit, and 39.3 percent were not enrolled for credit.
- Large percentages in all groups were employed full-time (3 or more hours per week). Certificate seekers were the group with the largest percentage employed full-time (60.7 percent), followed by nondegree/noncertificate seekers (56 percent), and associate-degree seekers (47.6 percent).
- Correspondingly, the bulk of respondents were employed while at FCC. Certificate seekers were the least likely to be employed (13.1 percent), followed by associate-degree seekers (20.1 percent), and



those not seeking a degree or certificate (22.7 percent). This finding is somewhat counter-intuitive in that one would expect that nondegree/noncertificate seekers would be more likely to hold jobs than degree-seeking students. It seems probable that the larger proportion of women respondents in the nondegree category accounts for these results.

- Most respondents did not apply for financial assistance. Slightly over 16 percent of respondents in the certificate group reported they received some form of financial aid, 14 percent of the associate-degree group and 6.2 percent of the nondegree/certificate group also received financial aid.
- Almost all respondents (94 percent) were Colorado residents. As expected, more of the nondegree seekers were residents of Colorado (96 percent) than were either the certificate group (86 percent) or the associate-degree group (92 percent).

Table 3 summarizes the majors or areas of study of the respondents. Majors or areas of study for the certificate-seeking group were diverse but tended toward the applied or vocational fields. Two majors accounted for over 44 percent of the respondents in this category: Business and Commerce Technologies (20.6 percent) and Secretarial Technologies (23.8 percent). In the associate-degree group, majors and areas of study were even more diverse, with five majors or areas of study accounting for over half of the respondents: Business and Commerce Technologies (22.4 percent), Public Service Technologies (10.6 percent), Health Services and Paramedical Technologies (8.1 percent), Data Processing Technologies (7.5 percent), and Mechanical and Engineering Technologies (6.2 percent). Of the noncertificated nondegree group, responses were even more scattered than for the other two groups. Business and Commerce Technologies (16.2 percent) and Health Professions (13.1 percent) were the two majors or areas of study above the 10 percent level.

Respondents' Goals and Achievements. Tables 4, 5, 6, and 7 are most significant for answering the questions: What were the respondents' goals when they came to FCC? How are they doing with respect to achieving these goals? As Table 4 shows, the goal pursued by the largest majority of all respondents was "to increase my knowledge and understanding in an academic field" (83.2 percent). The second most pursued goal (54 7 percent) was "to improve my knowledge, technical skills, and/or competencies for my job or career." Correspondingly, these two goals ranked the highest as goals achieved or being achieved by the total respondents group.

With the exception of the respondents group seeking an associate degree, the two goals of the certificate-seeking group and the group seeking neither a certificate or a degree were the same as for the total respondents group (see tables 5 and 7). The group seeking an associate degree varied much more as far as goals that were important. Based on their responses, this group was especially interested in (1) increasing their knowledge and understanding in an academic field,



) obtaining a certificate or degree, (3) preparing for a new career, (4) discovering treer interests, (5) completing courses needed to transfer, and (6) formulating ng-term career plans and goals. Over 75 percent indicated that they had achieved were achieving the goal of increasing their knowledge and skills in an academic eld.

Reasons for Leaving. Item 16 of the Former-Student Questionnaire provided at a from which students' reasons for leaving were tabulated. Table 8 summarizes the responses of each of the groups with respect to this item. Table 9 shows the vermost important reasons for students' leaving (the five reasons with the highest requencies and percentages) for the total sample and for each subgroup.

While no single pattern emerges from Table 9 across all three subgroups or cross the five top-ranked reasons within each group, several points are noteworthy:

- Conflict between work, home, and study responsibilities is the major reason for leaving.
- Lack of money and inability to earn enough money deter program completion.
- A good share of the persons who did not return had met their academic and personal goals.
- Dissatisfaction with the learning environment was a reason for leaving for only one of the groups—the noncertificate/nondegree seekers. This result does present some cause for concern since it is linked with the group that draws most frequently on FCC programs.

Evaluation of College Services. Item 18 of the Former-Student Questionnaire sked respondents to evaluate a number of the services FCC provides students. The purpose of the item was to assess students' awareness, use, and satisfaction with a particular service. To accomplish this end, each person was instructed to evaluate each service in one of four ways: (1) I did not know about this service, 2) I knew about this service but did not use it, (3) I used this service and was atisfied with it, and (4) I used this service but was not satisfied with it.

Table 10 presents the services each respondent was asked to evaluate and dentifies the number and percentage of respondents selecting each of the four response options. It should be noted that while Housing Services was listed as one of the FCC services to be evaluated, the college does not have any formally recognized service in this area.

Table 11 shows which five services were most recognized (that is, services the most persons were aware of) and the five that were least recognized. Actually the five services most recognized could possibly have been predicted since they are all services that respondents must use in the process of attending FCC. However, it is important to be aware of this fact since it is through these services and the College's academic programs that the College has its most constant contact with students. As a result, the greater extent to which these services are accessible and



relevant to students' needs, the greater the impact of the College in terms of helping students become more efficient and effective and make better use of the services.

In terms of the least recognized services, the two that need further study are child care and career planning. Given the growing number of persons with children who are attending FCC at is significant that the College be aware of needs concerning child care and publicize the availability of this service. As far as career planning is concerned, additional analysis needs to be conducted to determine the extent to which students who desire such a service are getting it. As the data on student goals indicate, career planning is especially important to students seeking as associate degree.

Table 12 presents the five services that respondents indicated are most satisfactory and least satisfactory. The ranking of services was determined by calculating the proportion of students using the service who were satisfied with it (number of students who used the service and were satisfied with it divided by the total number of students who used the service). As the data show in Table 12, the FCC library ranked as the most satisfactory service in terms of the proportion of students who used it. This finding is most gratifying in light of the work that has been done over the last two years to improve this service for all of our students.

The high rankings of tutoring and student-employment services are also significant since they are both services that potentially enhance students' ability to complete their programs. Administrators might consider extending these services.

In interpreting the services that ranked least satisfactory, a low proportion of the persons who used the career planning service evaluated it as satisfactory. This is cause for some concern. With the exception of housing services, concern also must be expressed with the other "least satisfactory" services. Academic advising, and guidance and counseling are critical to ensure effective student planning and performance. If FCC is to remain a viable institution in a time of shrinking enrollments and national challenges to the quality of postsecondary institutions, the College must determine the reasons for the low evaluation.

Current Educational Plans. Table 13 summarizes the respondents' plans for additional education. This is an important table of information with respect to our new institutional marketing goals. Over half of all respondents (54.2 percent) indicated that they do not have any additional plans for formal education pursuits at this time, and 8.3 parcent identified that they are currently undecided. It may be important to contact these persons in the near future to inform them about our continuing and new offerings as well as remind them of our continuing interest in helping them meet their educational needs. The 104 respondents who indicated they plan to reenroll at FCC (13.3 percent) is a group we should contact immediately to determine if they have any needs we can help them meet.



TABLE 2

Background/Demographic Information for Total Sample and Separately for Degree Categories

	CERTI	FICATE	ASSOCIAT	E DEGREE	NEIT	HER	TOTAL*	
	N N	#* <sub>11</sub>	N	0,0	N	G, (1)	N	0/0
Gender								
0 Female	74	59.1	95	57.6	381	66.8	515	64.3
1 Male	27	40.9	70	12.1	189	33.2	286	35.7
Total	66	160,0	165	100,0	570	100.0	801	100.0
No Response	(1	()_()	()	0.0	4	¢7	4	0.5
Racial/Ethnic Category								
0 American Indian	()	0.0	}	2.0	7	1.3	10	1.3
1 Asian	l)	(}_ <del>(</del> }	i	0,6	4	0.7	5	0.7
1 Black	1	1.6	(1	(),()	3	0.6	4	0.5
3 Hispanic	;	1.0	9	5.9	8	1.5	20	2.7
4 White	51	43.4	140	91.5	519	96.0	716	94.8
Tatal	61	100.0	153	100.0	541	100.0	755	100.0
No Response	ĵ	7.6	1.2	7.3	33	5.7	50	6.2
Age:								
0 Unde: 18	1	1.6	(1	0,0	9	1.7	10	1.3
1 18-22	<u>.</u> 2(}	31.7	60	39.2	130	24.3	210	28.0
2 23-25	ų,	14.3	.40	26.1	80	16,6	138	18.4
3 26-30	11	17.5	[9]	12.4	86	16.1	116	15.5
1-31-40	- 11	17.5	17	11.1	115	21.5	143	19.0
5 41-50	ŋ	14.3	l i	9.2	59	11.0	82	11.0
h 5]-60	2	3.2	3	2.0	41	7.7	46	6.1
7 blorover	(1)	(1)(1)	()	0,0	6	1.1		0.8
Total	63	100.0	153	100,0	535	100.6	75 i	100.0
No Response	3	1.5	13	7.3	39	6,8	54	6.7

<sup>\*</sup>Non-Tetal magnetic and slightly discrete in the sense.



<sup>\*</sup>Note: Total may not sum to 100.0 due to roundior error.

	CERTI	FICATE	ASSOCIAT	TE DEGREE	Set	THER	TO	tal.•
	Ŋ	d*.	N	9	, N	e <sub>e</sub>	N_	i <sup>p</sup>
Highest Degree Held								
0 GED	3	4.5	9	5.5	20	5.2	43	5.3
1 High School Diploma	43	65,2	135	82.3	i45	01.5	529	65.8
2 Associate Degree	i	7.6	11	6.7	],6	4.6	45	5.6
3 Bachelor's Degree	8	12.1	}	1.8	103	18.4	115	14.3
4 Master's Degree		1.5	()	(),()	22	3.9	23	2.9
5 Professional Degree	]	3,(1	0	().()	i4	2.5	16	2.0
6 Doctorate	()	(),()	ij	()_()	0	0.0	0	(i,0
7 None		6.1	6	3.7	22	3,9	33	4.1
Total	ho	0,001	164	100.0	50!	100.0	804	100.0
No Response	()	(),()		0.6	13	2.3	21	2.5
Degree Goal		· · · · · · · · · · · · · · · · · · ·						
0 Certificate	66	(,,()()]	()	0.0	()	0,0	66	8.2
1 Associate Degree	()	0,0	165	100.0	Ü	0.0	165	70,5
2 Neither	0	0.0	0	0,0	574	100,0	574	71.3
Total	66	100.0	165	100,0	574	100,0	(05	100.0
No Response	(ı	0.0	ΰ	(1,1)	0	0.0	20	2.1
Number of Changes of Major	<del> </del>			<u></u>		<del> </del>		
0 Never Declared Major		220	26	16.0	341	65.0	187	51.1
1 Never Changed	4	69,5	113	69.8	154	29.3	311	41.1
2 Once	)	34	18	11.1	17	3.2	38	5.0
3 Twice	)	1.4		2.5	9	7	15	2.0
4. These or More	1	1.7	1	0,6	1	0.8	6	0.8
Total	54	100,0	162	100.0	525	100.0	757	100.0
No Response	 	10.6	}	1.0	.49	8.5	68	8.2

 $<sup>163^{\</sup>mathrm{Not. Total mas nor sum to 1000}}$  due to rounding error



	CERTHFICATE		ASSOCIATE DEGREE		NETT	HER !	тотаг.	
	S S	10.711	N	u, <sup>0</sup>	N	%	<u> </u>	0/6
Grade Point Average  0 4.00 to 3.01  1 3.00 to 2.01  2 .00 to 1.01  3 1.00 or less  ! Unknown  Total  No Response	11 21 1! 4 0	23.4 44.7 23.4 5.5 0.0 100 0 28.8	45 57 19 8 2 122 43	36.9 46.7 8.2 6.6 1.6 100.0 26.1	178 72 102 12 14 378 196	47.1 19.0 27.0 3.2 3.7 100.0 34.1	234 150 23 24 16 547 258	42.8 27.4 22.5 4.4 3.0 100.0 32.1
Enrollment Status While Enrolled  Defall-Time Student Part-Time Student Not for Credit Total No Response	26 35 0 61 5	42.6 57.4 0.0 100.0	78 85 0 163	47.9 52.1 0.0 100.0 1.2	67 270 219 556 18	12.1 48.6 37.3 100.0 3.1	171 390 219 130 25	21.9 50.0 28.1 100.0 3.1
Employment Status While Attending  0 Not Employed  1 1-10 Hours/Week  2 11-20 Hours/Week  3 21-35 Hours/Week  4 36 or More Hours/Weel  Tota. No Response	8 6 5 5 61 5	13.1 9.8 8.2 8.2 60.7 100.0	33 \ 7 17 29 78	20.1 10.4 17.7 47.6 100.0 0.6	137 19 42 58 313 559	22.7 3.4 7.5 10.4 56.0 100.0 2.5	170 32 67 94 434 797 28	21.3 4.0 8.4 11.8 54.5 100.0 3.4

<sup>165</sup> 

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<sup>&</sup>quot;Note: Total may not similar 100 e due to ro. diag error

· [	CERTIFICATI	:	ASSOCIAT	E DEGREE	NEIT	HER	TO	TAL*
1	<b>V</b> ,	0) (0	N	. %	N	%	N	%
Applied for Financial Assistance  0 Yes, and Areceived it 1 Yes, but I did not receive it 2 Yes, but I left before I found out if I received it 3 No Total	7\ 3	16.6 11.6 '5.0 66.6 00.0	23 15 5 !?,	14.0 9.2 3:1 73.8 100.0	35 40 21 477 573	6.1 7.0 3.7 83.3 100.0 1.9	68 62 29 638 797	8.5 7.8 3.6 80.1 100.0 2.2
Resident State  O Colorado  Other than Colorado  Total  No Response	56 17	86.2 13.8 00.0 1.5	151. 	91.5 - <u>8.5</u> 100.0 0.0	54 . 546 26	95.5 14.5 100.0 0.3	753 49 802	93.9 6.1 100.0 1.0

<sup>&</sup>quot;Not: Total may not sum to 1000 due to joundamentor.



TABLE 3

Major or Area of Study of Respondents for Total Sample and Separately for Degree Categories

	CERTI	FICATE	ASSOCIAT	E DEGREE	NEIT	THER	TOTAL	
MAJOR OR AREA OF STUDY	N	( <sup>1</sup> )	N	¶,	N	%	N	<b>%</b>
Agriculture and Natural Resources	0	0.0	1	0.6	1	0.3	2	0.4
Architecture and Environmental Design	1	1.6	0	0.0	2	0.6	3	0.5
A.ea Studies (includes Asian Studies, Black Studies)	U	0.0	0	0.0	0	0.0	0	0.0
Biological and Life Sciences	0	0.0	2	1.2	3	0.9	5	0.9
Business and Management	0	U. 7	3	1.9	6	1.8	9	1.6
Communications	0	0.0	1	0.6	0	0.0	1	0.2
Computer and Information Sciences	0	0.0	1	0.6	2	0.6	3	0.5
Education	1	1.6	3	1.9	23	7.0	27	4.9
Engineering	0	0.0	3	1.9	9	2.8	12	2.2
Fine and Applied Arts (includes Art, Dance, Drama, Music)	0	0.0	5	3.1	15	4.6	20	3.6
Foreign Languages	0	0.0	1	0.6	2	0.6	3	0.5
Health Professions	0	0.0	0	0.0	43	13.1	43	7.8
Home Economics (includes Clothing and Textiles, Institutional Housekeeping, and Food Service Management)	0	0.0	2	1.2	5	1.5	7	1.3
Law	()	0.0	1	0.6	0	0.0	1	0.2

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ALLIAN ON ANY OF ARTIRU	CERTIFICATE		ASSOCIAT	TE DEGREE	NEI	THER	TOTAL	
MAJOR OR AREA OF STUDY	N	\$	N	<b>%</b>	N	9.	į 8	%
Letters (includes Creative Writing, Literature, Philosophy, Speech)	ì	1.6	1	0.6	10	3,1	12	2.0
Library Science	0	0.0	0	0.0	0	o()	0	0.0
Mathematics	0	0.0	2	1.2	3	6.9	5	0.9
Military Scinnes	0	0.0	0	0.0	0	0.0	ŋ	0.0
Physical Sciences (include: Chemistry, Physics, Earth Sciences)	0	0.0	1	0.0	5	1.5	6	1.1
Psychology	1	1.6	4	2.3	13	:0	18	3.3
Public Affairs and Social Services	0	0.0	C	0.0	2	0.6	2	0.4
Social Scinaces (includes Anthropology, Economics, History, Political Science, Sociology)	6	9.5	8	5,3	13	: 0	27	4.9
Theology and Religion	0	0.0	. 0	0.0	;	0.9	3	0.5
Interdisciplinary Studies	0	ل ن)	0	0.0	0	0,0		0.0
Other	j	6,0	4	2.3	4	1.4	8	1.5
Undecided but probably program of four or more years	U	0.0	Ü	9.0	1	1.2	4	0.7



UALAN AN ARPLA APARTURY	CERT	IFICATE	ASSOCIA	te degree	NEI	THER	TOTAL	
MAJOR OR AREA OF STUDY	N	iţ,	N .	<b>ن</b> ةٍ,	N	1 <mark>7</mark> 7	N _	%
Business and Commerce Technologies (includes Accounting, Bat. ing, Commercial Art, Hotel and Restaurant Management)	13	20.6	36	22.4	53	16.2	102	18.5
Secretarial Technologies (includes Office Supervising and Management, Stenographic and Typing Technology)	15	23.8	5	3.1	4	1.2	24	4,4
Personal Service Technologies (includes Stewardess Training, Cosmetologist)	0	0.0	0	0.0	0	J.0	0	0.0
Data Processing Technologies (includes Computer Programming, Keypunching)	,	6.3	12	7.5	5	1.5	21	3.8
Health Services and Paramedical Technologies (includes Dental and Anedical Assistant Technology, LPN, Cccupational and Physical Therapy Technology)	5 ,	7.9	13	8.1	12	3.7	30	5.4
Mechanical and Engineering Technologies (includes Aeronautical and Automotive Technology, Welding, Electronics, Architectural Drafting)	3	4.8	10	6.2	9	2.8	22	4.2

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VALOR OR AREA OF OPPING	CERTI	FICATE	ASSOCIA	TE DEGREE	NEI	THER	TOTAL		
MAJOR OR AREA OF STUDY	Ŋ	۲,	N .	ď,	N	u <sub>ij</sub>	N	in in	
Construction and Building Technologies (includes Carpentry, Plumbing, Sheet Metal, Heating)	()	0,0	.()	0.0	2	0.6	2	0.4	
Natural Science Technologies (includes Agriculture Technology, Environmental Health Technology, Forestry and Wildlife Technology)	()	0,0	1	0.6	0	0.0	,	0.2	
Food Services Technologies (includes Food Service Supervising, Institutional Food Preparation)	()	0.0	0	0.0	2	0.6	2	0.4	
Public Service Technologies (includes Law Enforcement Technology, Teacher Aide Training, Fire Control Technology, Public Administration Technology)	}	4.8	17	10.6	1.?	3.7	32	5.8	
Recreation and Social Work Related Fechnologies	(1	().()	1	0.6	3	0,9	4	0.7	
Other	0	()_()	4	2.1	i	1.5	9	1.6	
Undecided but probably less than four-year program	10	15.9	10	11.8	52	15.9	81	14.7	

TABLE 4

Goals Aspired To and Goals Achieved or Being Achieved
By All Respondents

		Goals that		Goals Achieved		
		were im	portant	teing ac		
		N	٠٠,	N	4%,	
Λca	demic Goals	<u>.</u>				
Α	To increase my knowledge and understanding in an academic field	687	83.3	452	54.8	
В	To obtain a certificate or degree	226	27.4	76	9.2	
С	To complete courses necessary to transfer to another educational institution	194	23.5	148	18.0	
D	To complete high-school requirements	3	0.4	2	0.2	
E	Other	107	13.0	86	10.4	
Car	eer-Preparation Goals					
F	To discover career interests	291	35,3	218	26.4	
G	To formulate long-term career plans and/or goals	311	37.7	249	30.2	
H	To prepare for a new career	107	23.9	104	12.6	
I	Other	65	7.9	3.1	4.1	
Car	ee: Improvement Goals			•	ļ	
J	To improve my knowledg , technical skills, and/or competencies for my job or career	451	54.7	329	39,9	
K	To increase my chances for a raise and/or promotion	219	26.6	124	15.0	
I.	Other	7.1	0.0	36	4.4	
Sev	tial- and Cultural-Participation Goals					
M	To become actively involved in student life and campus activities	162	10.6	118	14.3	
N	To increase my participation in cultural and social events	i21	14.7	72	8.7	
O	To meet people	112	13.6	95	11.5	
P	Other	12	1.5	9	1.1	
Pe	rsonal-Development and Enrichment Goals			ļ		
Q	Co increase my self-confidence	83	10.1	44	5.3	
R	To improve my leadership skills	87	10.6	39	4.7	
i,	To improve my obility to get along with others	48	5.8	31	3.8	
Т	To harn skills that will enrich my daily life or make me a more complete person	252	30,6	190	23.0	
ί.	To develop my ability to be independent, set Ricliant, and adaptable	121	14.7	53	6.1	
V	Other	73	8.8	48	5.8	



TABLE 5

Goals Aspired To and Goals Achieved or Being Achieved
By Respondents W'ho W'ere Seeking a Certificate

4	Goals that were important		Goals ac o being ac	r
	N	+7.	:.	-7,
Cademic Gouls				
To increase my knowledge and understanding in an academic field	57	86.4	25	37.9
To obtain a certificate or degree	64	97.0	31	47
To complete courses necessary to transfe, to another educational institution	13	19.7	8	12.1
To complete high-school requirements	3	4.6	2	3.0
Other	'1	16.7	3	4.6
lareer-Preparation Goals				
To discover career interests	15	22.7	4	6.1
To formulate long-term career plans and/or goals	18	27.3	6	9.1
I To prepare for a new care :r	21	31.8	9	13.6
Other	8	12.1	3	4.0
lareer-Improvement Goals			 	
To improve my knowledge, technical skills, and/or competencies for my job or career	64	97.0	45	68.2
To increase my chances for a raise and/or promotion	4_	63,6	24	36.4
. Other	13	19.7	-1	6.1
locial- and Cultural-Participation Goals				
A To become actively involved in student life and campus acres ities	-1	6.1	3	4.6
N To increase my participation in cultural and social events	2	3.0	2	3.0
) To meet people	3	4.6	3	4.6
Other	0	0.0	Ü	0.0
Personal-Develop: and Enrichment Goa's	i			
2 To increase my self-confidence	ų,	13.6	5	7.6
R To improve my leadership skills	io	24.2	8	12.1
> To improve my ability to get along with others	5	7.6	3	4.6
To learn skills that will enrich my daily life or make me a more complete person	5	7.6	2	3.0
To develop my ability to be independent, self-relignit, and adaptable	2	3.0	2	3.0
v Other	7	10,6	0	0,0



TABLE 6

Goals Aspired To and Goals Achieved or Being Achieved
By Respondents Who Were Seeking an Associate Deorte

		Goals that		Goals ac		
		wereim	portant	being achiev: d		
		8	Ţ.	N		
Aca	dentic Goals					
A	To lacrease my kindledge of the enstanding in an academic field	162	98.2	125	75.8	
В	To obtain a certificate or degree	150	96.4	.45	27.3	
C	To complete courses necessary to transfer to another educational institution services and the services are the services and the services are t	7	43.6	48 	29.1	
D	To complete high-school requirements	0	0,0	0	0.0	
E	Other	1-1	8.5	8	4.9	
Çaj	eer-Preparation Goals					
1:	To discover career interests	75	45.5	-43	26.1	
G	To formulate long-term career plans and/or goals	68	41.2	41	24.9	
H	To prepare for a new career	101	61.2	75	45.5	
I	Other	3.2	19.4	13	7.9	
Car	eer-Improvement Goals					
J	To improve my knowledge, tecanical skills, and or competencies for my job or careci	62	37.6	38	23.0	
K	To increase my chances for a raise and/or promotion	37	22.4	18	11.0	
1.	Other	1-1	8.5	3	1.8	
So	rial- and Cultural-Participation Goals					
M	To become actively involved in student life and campus activities	39	23.6	20	12.1	
N	To increase my participation in cultural and social events	18	11.0	11	6.7	
()	To meet reople	18	11.0	17	10.3	
P	Other	i	0.6	0.	0.0	
ľę	rsonal-Development and Enrichment Goals				l	
Q	To increase my self-confidence	42	25.5	18	11.0	
R	To improve my leadership skills	33	20.0	9	5.5	
S	To improve my ability to get along with others	18	11.0	11	6.7	
Ĭ.	To learn skills that will enrich my daily life or make me a more complete person	22	13.3	8	4.9	
ſ,	To develop my ability to be independent, self-reliant, and adaptable	21	12.7	10	5.1	
Λ.	Other	15	9.1	10	6. i	



TABLE 7

Goa's Aspired To and Goals Achieved or Being Achieved

By Respondents Whō Were Seeking Neither a Certificate Nor an Associate Degree

		Goals that		Goals achieved or being achieved		
	•			8		
	1	1 ''		"		
	demic Goals	1	50 A			
A	To increase my knowledge and understanding in an academic field	468	78.8	302	50.8	
В	Lo obtain certificate on degree	;	0.5	()	0,0	
C.	To complete courses necessary to transfer to another educational institution	100	18.4	92	15.5	
D	To complete nigh-school requirements	υ	0.0	0	. )	
E	Other	82	13.8	75	12.6	
Car	eer Preparation Goals					
F	To discover career interests	201	3 i s	174	28.8	
G	To formulate long-term career plans and/or goals	225	57,9	202	34.0	
Н	To prepa. 2 for a new areer	75	12.6	20	3.4	
I	Other :	1 25	4.2	18	3,0	
Car	eer-Imp, avement Goals				, 	
J	To improve my knowledge, technical skills, and or competencies for my job or career	325	54.7	246	41.4	
K	To increase my chances for a raise and or 1 romotion	140	23.6	⟨ 82	13.0	
I.	Other	47	$\mathbf{s}.o$	29	4.9	
Soc	ial- and Cultural-Participation Goals	!				
M	To become actively involved in student life and campus activities	119	20.0	45	16.0	
N	To increase my participation in cultural and social events	101 	17.0	50	0.01	
O	To meet people	· i	15.3	75	12.6	
P	O'her	.1	1.9		1.5	
Per	sonai-Development and Enrichment Goals		,	1		
Q	To increase my self-confidence	3.2	5.1	21	5, 5	
ĸ	•	48	8.1	22	3.7	
S	To improve my ability to get along with others	25	1.2	17	2,9	
T	To learn skills that will enrich my daily life or make me a more complete person	?25	37.9	180	30,3	
ί.	To develop my ability to be independent, self-reliant, and adaptable	98	16.5	41	7.0	
Λ,	Other	51	8.6	38	6.4	

S = 591



TABLE 8

RESPONDENTS' REASONS FOR LEAVING
FOR TOTAL SAMPLE AND SUBGROUPS

Л	4	
7.9	-7	٦
	- 6	4

	1			1	·			- · <del>- · · · · · · · · · · · · · · · · ·</del>	
			CERTIFICATE .		TE DEGREE	NEIT	HER	TOTAL	
	,	N	;	, N	<b>'</b> \$,	Ŋ	ď.	N	ιζ,
Ac	ademic Reasons		·		,	,			·
A	Achieved my academic goals	21	31.8	39	.23,6	265	44.8	326	39.5
B	Transferred to another college	ÿ	13.5	41	24.8	109	18.3	159	19.3
С	Needed a break from college	8	12.1	20	12,1	21	3.5	49	5.9
D	Courses/programs I wanted were not available	5	7.6	14	8.5	101	17.0	120	14.5
E	Dissatisfied with my academic performance	5	7.6	25	15.1	111	18.7	141	17.1
F.	Dissatisfied with the quality of teaching	11	16.7	31	18.8	99	16.7	141	17.1
G	Dissatisfied with the learning environment	10	15.2	35	~ <u>21</u> 21 7	135	22.7	180	21.8
Н	Course work not what I wanted	13	19	42	25.4	77	13.0	132	16.0
I	Unsure of my academic goals	11	16.7	. 25	15.1	109	18.3	145	17.6
Fir	nancial Reasons		'.				,		
J	Did not have enough money to continue	22	3 .8	65	39.7	169	28.5	256	3i 0
K	Could not earn enough money while enrolled	18	27.3	59	35.9	131	22.0	208	25.2

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TABLE 8 (Continued)

	CERTIFICATE		ASSOCIAT	TE DEGREE	REE NEITHE		TAL	
·	Ŋ	är .	N N	Ç	.1	<sup>1</sup> / <sub>4</sub> 1	;	Ţ,
Other Reasons				ļ				
L Achieved my personal goals	y	136	27	16.4	17	31.1	1.1	26.3
M Accepted a job or entered the military	5	7.6	14	გ.5	l. ;	17.0	رنز	14,5
N College experience not what I expected	4	6.1	15	7,3	1	6.4	<b>%</b>	8,5
O Few people I could identify with	5	7,6	14	გ.5	•	5.2	50	d.;
P Moved out of the area	9	13.6	16	97	50	9.9	84	(6,2
Q Could not work and go to school at the same time	32	48.7	93	56.4	251	42.2	375	45.5
R Other responsibilities became too great	21	31.8	59	35.8	129	21.7	209	25.3
S Personal problems	17	25.8	31	18.8	109	18.3	157	19.0
T Other	5	7.6	15	9.1	65	°0.9	85	10.3

N = 66

 $c_{ij} = \frac{1}{N} = \frac{1}{N} \cdot \frac{1}{N}$ 

17 = 594



TABLE 9

Unit vive Most Important Reason's for Leaving
For Total Sample and Subgroups

	(;	ERTUSIC.	VIE	ASSO	CIATE D	EGREE		SUITHE	R		TOTAL	
REASONS FOR LEAVING	{	***	(l <sup>e</sup>	R	,\	(†* ()	R	Ŋ	o' <sub>o</sub>	R	N	u' 'a
Could not work and go to school at the same time	!	<b>5</b> .1	18,5		v3	5h 3	"	.351	12.3	1	376	15.6
Achieved my academic goals	1	]	318		34	23,6	ļ	266	41.8	۱ "	326	39.5
Did not have enough stores to conficue		")	33.3	;	65	39,4	1	[69	28.5	3	256	31.0
Aducted approximations		()	13.0		27	16.4	}	185	31.1	4	221	26,3
Other responsibilities become too great	· }	21	11.8	1.5	Şu	35,8		1.19	21.7	,	209	25.3
Could not earn energia raone;	۱	18	27.3	4.5	ξ(	15,8	,,	. 31	22,1	-	208	15.2
Dissatisfied with fearing environment		ļu ,	15,3	-	35	212	j	135	22.7	-	[80]	21.8

18.5 N = 66 N = 165 N = 594 N = 825

TABLE 10

## RESPONDENTS' AWARENESS, USE, AND SATISFACTION WITH COLLEGE SERVICES

Did not know about service  Knew about service but did not use it  Used service and was satisfied  Used service but was not satisfied									
	() <u>}</u>	25%		75©					
					.:				
Admissions	17   8 	132			o68				
Registration	S   8 		273	536					
Business office	41			627					
Academic/Advising		165 ∭124 ∷ 132	404						
Guidance, Counseling		206 1124 83	412						
Career planning	11		396						
Job placement .		190	264		•				



### TABLE 10 (Continued)

Legand

Did not know about service Knew about service but did not use it Used service and was satisfied Used service but was not satisfied 100% 25% 50°C 75% Housing services Cafeteria 91 Health services Tutoring 114 Minority affairs College et a mal programs Reculation and athletic programs Financial aid

188



#### TABLE 10 (Continued)

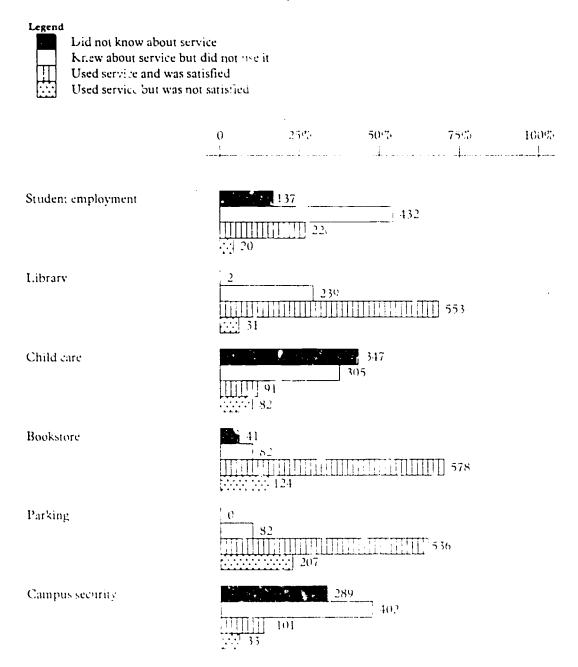




TABLE 11
THE FIVE MOST AS: EAST RECOGNIZED SERVICES

SERVICES	RANK		
Most Recognized			
Parking	ì	825	100.0
Registration	2	917	99.0
Admissions	;	308	97.9
Bookstore	.1	784	95.0
Business Office	÷	743	90.1
			N = 825
Least Recognized			
Housing Service	1	751	91.1
Child Care	2	347	42.1
Campus Security	3	289	35.0
Health Services	4	281	34.1
Career Planning	5	272	33.0
			N = 825

TABLE 12  $THE\ Five\ Most = {\it to}\ Least\ Satisfactory\ Services.$  Eased on the Proportion Using Who Were Satisfied

SERVICES	RANK	N SATISFIED	USING	
Aost Sarisfactory				
Library	•	553	584	94.7
Tutoring	2	114	122	93.4
Student Employment	3	226	<sup>5</sup> 46	91.9
Business Office		627	702	89.3
Health Services		115	131	87.8
Recreation & Athletic Prog. ms	5	65	. 4	87.5
Least Satisfactory				
Career Planning	1	41	157	26.1
Academic Advising	2	1.24	256	48.4
Housing Services	3	8	16	50.0
Child Care	•	91	173	52.6
Guidance and Counseling	4		207	59.9

Plans for Additional Education	CERTIFICATE		A5SOCANTE DI GREE		NETTH 7.		тотлі.	
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#### IV. SUMMARY

During July of 1977, 2,560 Fairview College students who had failed to return for at least one quarter during the 1976-77 academic year were sent a question-naire. They were asked their reasons for not returning, satisfaction with various aspects of FCC, present and future plans, and background and demographic information. After a follow-up mailing in September, 825 usable questionnaires were received for an adjusted response rate of 38 percent. Of the 825 respondents, 66 (8 percent) were seeking a pertificate from the College when they left, 165 (20 percent) were seeking an associate degree, and 594 (70 percent) were not seeking a degree or certificate. Data from the survey were analyzed separately for each of these three groups.

The questionnaire background data for respondents revealed fairly predictable patterns among the three groups of students (certificate, associate, and neither). Those not seeking a degree or certificate were almost encelly residents of Colorado; they tended to be somewhat older, with an average age range of 26 to 30 and a range from under 18 to 65; they were more likely to be female by a ratio of two to one, and most were white. Two-thirds of this group held a high-school diploma or GED, almost one-third held a higher degree, and less than 4 percent held no degree. Nearly three-fourths enrolled at FCC to learn new skills, upgrade skills, or for personal enrichment and 40 percent had been enrolled one term or less. One of eight was enrolled full-time, three-fourths were employed, and few received any financial aid. Grades were high for this group, averaging 3.4. The majority (nearly two-thirds) had never declared a major.

The respondents seeking a certificate or an associate degree generally shared similar backgrounds. These students were primarily from Colorado. They tended to be older than traditional students (certificate seekers averaged 26 to 30 years of age, while associate seekers were 23 to 25); they were more likely to be female by a ratio of three to two; and most were white. Most associate-degree students had a high-school diploma or GED (88 percent); the same was true of 70 percent of the certificate seekers (with an additional 17 percent in this group holding bachelor's or higher degrees).

The two groups shared a desire to increase their knowledge and skills in an academic field and obtain a certificate or degree. However, over 40 percent of the associate-degree respondents enrolled to complete courses necessary to transfer to another college, while only 20 percent of the certificate seekers aspired to that goal. On the other hand, only 37 percent of the associate-degree seekers aspired to improve their job-related skills, while 97 percent of the certificate seekers sought this goal.

Almost 30 percent of the certificate group attended the College for only one term before leaving, while 20 percent of the associate-degree group—ere enrolled for one term before leaving. Slightly over 40 percent of both groups were full-time students. Only 13 percent of the certific, e respondents were not employed at all



while at FCC and over 60 percent were employed full-time. In the associate-degree group, 20 percent were not employed, and almost half were employed full-time. A substantial minority of both groups received financial aid (between 26 and 34 percent) while at Fairview. Grades for both groups were good with 68 percent of the certificate group and 84 percent of the associate-degree group averaging 2.01 or better. Over two-thirds of both groups had declared a major and never changed.

Over 40 percent of the certificate seekers were from one of two major fields: Business and Commerce Technologies and Secretarial Technologies. Nearly 50 percent of the associate-degree seekers were from one of four technology majors: Business and Commerce, Data Processing, Health Services, and Public Services. These results may have programmatic implications for the violege if the proportions of all students enrolled at FCC in these major fields are substantially less than the proportions in these majors who left FCC. (For example, if the percentage of all associate-degree seekers enrolled in the Public Service Technologies program is, say, 2 percent, but 10 percent of those who leave are in the same program, this may indicate a potential problem in the program.)

Among all three degree groups, three reasons for leaving Fairview surfaced as important: conflict between job and studies, lack of money, and other responsibilities outside of college becoming too great. For those not seeking a degree or certificate, two other reasons were requently mentioned: achievement of personal goals and achievement of academic goals. Certificate seekers also frequently mentioned personal problems, and associate-degree seekers ranked dissatisfaction with the learning environment of FCC as another major reason for leaving.

Respondents were asked to rate their satisfaction with various services and functions of the College. From these ratings, the five most and least satisfactory aspects of FCC were inferred for each of the three groups of respondents by calculating the proportion using a particular service that was satisfied with it. The services that were most satisfactory were library, tutoring, student employment, the business office, and health services/recreation/athletic programs. The five least satisfactory services were: career planning, academic advising, housing services, child care, and guidance and counseling.

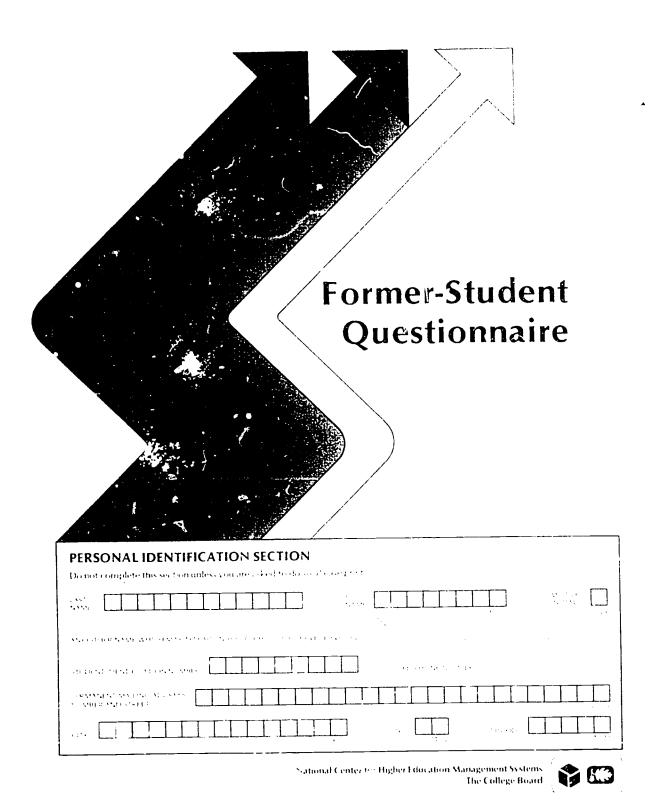
Most of the students in the certificate-seekers and noncertificate/nondegree-seekers groups (60 percent and 58 percent, respectively) did not have any additional educational plans at the time they were surveyed. Of the certificate seekers who did, 23 percent planned to reenroll at FCC.

In contrast to the other two subgroups, only 38 percent of the associate-degree scakers had no current plans for additional education. Of this group, 19 percent planned to reenroll at FCC, 21 percent planned to reenroll at another college, and 48 percent had arready reenrolled at another college.

## APPENDIN

Sample of Questionnaire Used in Study







#### STANDARD QUESTIONS SECTION

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#### LIST A: MAJORS AND AREAS OF STUDY

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0400	Biological and Life Sciences
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1700	Mathematics
1800	Military Sciences
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510 <b>X)</b>	Data Processing Technologies and Control computer
	Programming Keypunching etc.
5200	Health Services and Parame In al. Lechnologies unchales
	Dental and Medical Assistant Technology 18th Occupational
	and Physical Therapy Technology, etc.
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	Aeronautical and Automotive Lechnology, Westing
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#### **Additional Questions**

In addition to the questions you have already are wered, we will disperse rate as a survivery of eworld from all positions that are important for our study.

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- 22. Abore was your permanent residence while you were enrolled in our college?
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  - 1. In a state other than Colorado.



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### APPENDIX 5

Questionnaire Keypunching Formats Using 80-Column Cards



## Card 1 — Entering-Student Questionnaire for Two-Year Colleges and for Four-Year Colleges and Universities

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- 45	- •,		Lo ment projide		14.7	# <del>-</del>	Newspaper of magazine
36-	7()		Other Social and Cattars	75	14.8	3	Radio of IV advertisement Interm. For display
			Participation Casalsi		114	_	Chiller
; ·	- l,		Louise selt contalence		•		T. C. C.
385	. () ·		1 To improve leader hip states				
71.1	7.8		Trainpresse ability to get along with others				
.;0	- \		for learn skills that will enrich my daily life				
-11	<del></del> 1		i o desciop ability to be uidependent seit reliant and ada; table				
4.2	1		Other (Personal Decesopment and Enrichment Goals)				



### Card 2—Entering-Student Questionnaire for Two-Year Colleges and for Four-Year Colleges and Universities

olumns	Item Number		Description
			Student ID number
10			Card number 2
11	15a		Was our college first choice?
1.2	150		It no what kinds to ollege was treet choice?
: 1	16.		Financial and application plan-
1.4	; •		Time pote tence to classes
17	144		Torolament plans to mexitem.
16.	• .		Ad atronal question 1
; -	_1		Additional question 2
1	.1		Additional epiestica (3
1-4		ے	Additional question 4
. 1		Additional Questions Section	Additional question 5
.1	:	, <b>X</b> ec	Additional question (6)
		Ę	Additional question
	200	2	Additional spacetion, B
	2.	õ	Adiptional mastion 9
	113	Š	Additional question 30
		dite	Additional question 11
		70	3d bitional question 32
2	į		Additional question 13
	•		Victional mest of 14
- ' .ao			Additional question 15
			•



## Card 1 — Continuing-Student Questionnaire for Two-Year Colleges and for Four-Year Colleges and Universities

Item Columns Number		Description		Item Columns Number			Description	
1.9			Student ID number	4-4	- 1	ļ	To become actively involved in student life and campus activitie	
10 11	<b>,</b>		Card number "1" Sex	45	- <sub>1</sub> .	1	To become actively involved in student lite and campus activitie	
12			Racial ethnic category Age range	40	* M		To increase participation in cultural and social events	
13	4		Mantal status	4.	- 11.		Leancrease participation in	
15	5.0	] ہ	So				cultural and social events	
14,	5-1	i i	Yes, restricted mobility	4:3	- • ,		To meet people	
17	5.2	P S	Yes restricted hearing	4.1	🗸		Teemeet people	
18	5.1	Handicap Status	Yes instricted vision	50	"()		Other/Social and Cultural Participation Golds)	
19 20	54 ·	Ĩ	Yes, but prefer not to record  Other	1	*()*		Offs ((Social) and Cultoral Participation Coals)	
21	6	<i>,</i>	How long at our college?		٠,,		Leongreuse self confidence	
22	7 A	ſ	To mare ase knowledge and and c		٠,٠		Lomerouse self confidence	
			standing in an academic field	, , ;		4		
2.	- A.	į	To sacrease knowledge and seeler		, O	3	To amprove leadership skills	
			standing in an academy, field		().	<u> </u>	To impress leadership skills	
)4 	7 B		To obtain a certificate of degree.  To obtain a certificate of degree.	"	* R	Student Goals	To improve ability to get along with orbors	
25 26	7 B*		To complete copises neces 2%		.к.		I amprove abouty to get along with others	
27	٠,٠		to transfer To complete courses necessary				To do on skill, that will entitle my daily life	
28	~ ()		to nanster Other Acad the Coals		• 5.		Colourn wills that will entich investigate little	
20	. D.		Other Academie Course 5 5	(4)	- 1		Lo develop ability to be	
313	7.1		Terribe over my career interests				independent selt reliant and adaptable	
31 32	71.		Fordiscovering career interests  Fortinendate long term career plans and or goals	6:	. 1.		To develop ability to be independent, self-reliant	
4.4	21.	Student Goals	Tecteanulate long term career plans and or goals	16.2	* (		and adaptable  Other Personal Development and Emichment Cours	
3.4	٠.,	ą	To prepare for a new career				Other Personal Development	
35	- C -	2	To prepare for a new career		.1.		Land Linu binent Goals)	
36.	* 11		Other Career Preparation Costs	10:3	24	<u> </u>		
1	~ H+		Other Career Programme acids		8	garked Importance of Goals	Second Most Important, goa	
13	-1		Loumprove job cancer related		.;		Third Most Important, goal	
			Encycledge 33d and or [	ŧ.•.	.,	- <u>E</u> =	Current' degree aspiration	
			i minateria es	t.			Ultimate degree aspiration	
V.	-1.		To improve job can er related	+at 2			•	
			knowledge, skills, and or competencies	1			Major of area of study	
41.1	7.1		To increase chances to the topor		11		lorended enrollment status	
.401	. 1		and or promotion		1.		<ul> <li>Employment status during first</li> <li>term</li> </ul>	
41	24.		To increase chances for a rinse and or promozon	٠.	1:		Tame preference to classes	
4.2	~ k		Other (Ions of Career Improvement Goals)	76	1:		<ul> <li>Enrolling of plans for next term</li> <li>Enrolling and application plans</li> </ul>	
43	- K.		Other (Job. oc. Casser Improvement Goals)					

Note: Asterok identifies responses concerning whether or not respondents to lither, are achieving or have achieved the good



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### Card 2—Continuing-Student Questionnaire for Two-Year Colleges and for Four-Year Colleges and Universities

Columns	Item Number		Description
1.9			Student ID number
10			Card number 2
11	16.	ſ	Admissions
12	16,		Registration
1.1	16		Business Office
1.1	16		Academic advising
15	16		Guidance counseling and testing
10	16		Reading writing mat—and study skills improvement
1"	14+		* atoning
la	16		Minority affices
114	1++	કુ	College cultural programs
20	10.	12.	Recreation and athletic programs
21	16	35	Emancial aid
22	14.	Evaluation of Services	Student employment
_3	, (1)	e	Carrer planning
24	1ts	3	Tob placement
25	10	_	Housing are es
.'6	iti		Catetoria
2"	in		the 1th arrates
.78	; i.,		Litrary
294	10.		s bild care
300	100		Beeckstore
33	1		r dimg
12	16		4 amplis security
(:	300		Other
1.4	1		[Additional question 1]
15	18		Adomon, question 2
165	10		Additional question 3
,-	<u>.</u> 40	=	At fittional question (4)
18	.41	ch:	Ad-bitional question 5
314	-:-	Š	Additional question (6)
40	23	T)	Additional question
-41		Additional Questions Section	Additional question 8
3.2	25	2	Additional question 9
4.7	26	<u>.</u>	Additional question 10
4.3	.'"	de H	Additional question 11
45	85,	÷	Additional question 12
.40	.214		Additional question [13]
4.7	10		Additional question 14
48	37		Ad ational question 15



### Card 1—Program-Completer Questionnaire for Two-Year Colleges and for Four-Year Colleges and Universities

Columns	ltem Number		Description		ltem Number		Description
1.9			Student ID number	43	~ k <sub>1</sub> .	1	Other (Job. or Career Improvement Goals)
10 11	1		Card number 1 Sex	.‡.1	7.1		To become actively involved in student lite and campus activities
12 13	2		Racial ethnic category Age range	;;	-1-		To become actively involved in student life and campus activities
14	4	_	Manual status	:+.	- 11		To increase participation in cultical and social events
15 16	50 51	Handicap Status	No. Yes restricted mobility	4"	~ s.t.		To merease participation in cultural and social events
17	5-2	P S	Yes restricted hearing	48	- <		Lameet people
18	5.3	딀	Yes, restricted vision	49			
10	5-4	Ě	Yes, but prefer not to record	50	7(:		Tremeet people Other (Social, and Culture)
20	5.5	- 1	Other	,"'	٠.		Participation Goalst
21 22	6 7 N	ſ	How long at our college? To increase knowledge and under	31	~ (·)·		Other (Social) and Cultural Participation Goals:
			standing in an academic field	5.2	7 11		To increase self-confidence
23	- 1.		To merease knowledge and under			÷	To mere, is e-self-contadence
			standing in an academic field	54	<del>-</del> ()	Stud. nt Greals	l Lecumprove leadership skills
24	7 B		To obtain a certificate or degree	1			Louignove leady iship skills
25 26	- ( - B.		Toobtain is certificate or degree. Too certificate or assistance or art	ia i	* K	Sfu	To improve ability to get along with others
7-	~ 、 •		to transfer  To coal slete coarses recessary  to transfer		• R.		To improve ability to get four with others
	7 ()		Other Academic Coals	51.	• <		Loclean stalls that will enroll to the common stalls liter
29 30	i).		Other Academic Coals Todiscover my cateer exterests	,	• <.		Ledourn skills that will entrob my duly lite
1 12	71	<del>-</del> {	To discover my cares — sterests  Teen conducte long term career plans a. Tor gods	14:	• ;		Tradevelopinis, abdity to be andependent so reliant and adapted le
13	-1.	Student Goals	To formulate long term care- plans and or goals	6.1	- ! .		To develop my ability to be dependent seit rebust
5.3	٠.,	Stuc	To prepain for a new career				Landadaptable
15	• •		Loprepare for a next career	9.7	7 (		Other Personal Developme at end Enrichmer Cosalse
36	7 H 7 H•		Other (Career Preparation Counts) Other (Career Preparation Counts)	•, .	*( )		Coper Personal Development and Functioned Couls
38	-1		Learning to a separate conference conductoral	10-1	R	ak c	Most Important, youl
1 "	,		knowledge skills and the		· ·	a trad	
			confinitioners	.,,,	10	Ranke Importa of Coo.	The d Most Important goal
10	. 1.		Teamprove job career related knowledge, skills, and or competencies		14	<u> </u>	Whit degree or criticate are you receiving from college?
40	- 1		Homerease chances to factor of	6.4	1 1995		"da or or area of study
1	•		and er promotion	1	1.1		French, emollment status
41	7		To increase changes for a reservand or promise on	• • •	1.7		For program now completing were any credits earned from
42	řΚ		Other Job. or Cateer Improvement Goals				another colleger

Nort. Asserts identities responses conforming whether is not responsibility feed they are active, top or have achieved the goal



## Card 2—Program-Completer Questionnaire for Two-Year Colleges and for Four-Year Colleges and Universities

Columns	Item olumns Number		on	Columns	Item Number	Description	
1.9		Student	D number	45	15	Current employm	ent plans
10	10 11 13		Card number 12" Admissions Registration		16.	it you currently by starting a new job is it related to you of study at our co	to what extent r major or area
13	13 13	Business	office	ι~	1,	Current plans for education	1
14	13	Guidanc	ic advising e-counseling and testime	133	14	Ultimate higher	d degree
16	11	Reading study sk	writing math and ills improvement	90	1.1	Additional questi	
1"	13	Lutoron Minores		40	20 21	Additional questi Additional questi	
111	13	S College	cultural programs ion and attileti <b>c</b> programs	4.3	.12 .23	Additional questi	
20 21	13	Emanci.	il and	4.1	24	Additional questi	
23	13	THE CHEST	emples ment Kanang	315	26	Additional questi	on 8
24	11	<b>-</b>	en en Eservica	1.	27 298	Additional quest	on 10°
	13	Cytotor	lat Samijari s	\$14 1	un un	Additional quest	
28 29	1 1	Library Fundidic	2.41	11	11 1.	Additional quest Additional quest	
30	1.5	Books	•••	.:	1.1	Additional que :	ion 45
32	13	1	(SSC 1.11)*V				
1.4	13	e destatac ten gen a	ou taken and becoming or ation osaminate to elifed, i masor or area of strekt colleger				
		•					



### Card 1 — Former-Student Questionnaire for Two-Year Colleges and for Four-Year Colleges and Universities

Columns	Item Number		Description	Columns	Item Number		Description
1 9			Student ID number Card number - 1	45	· 1 ·		To become actively involved in student lite and campus activities
11	1		Sex	<b>;</b>	- M	'	To increase participation in cultural and social events
12	2		Racial ethnic category Age range	:	. 71.		To increase participation in cultural and social events
1.4	.1		Marital tatus	48			Les most prospie
15	5 ()		<b>∖</b> 0	49	٠.,٠		Lo meet people
in	5/1	Handicap Status	Yes restricted mobility	50	~ ( )		Other Social and cultural
17	5.2	22.0	Yes restricted hearing				Participation Goals)
18	5.3	di C	Yes restricted vision	7.1	<u> </u>		Other (Social, and Cultural
19	5.4	t and	Yes but prefer not to record				Purpupation Coals)
20	5.5	_	Other	1.	- 1		Termereases self-confidence
21	tr		Hess long at our codege?		. 10.		Lo merease self confidence
2.2	. A		To increase knowledge and under	1	. ()	Ę	To improve leadership skills
			standing in an academic field	1 11	10	3	To reprove readership skills
54	- A.		To merea e knowledge and ander standing in an academic feet.	100	, K	Student Goals	To improve ability to get along with others
24	7.13		To obtain a contituate of degree	57	2 K.	~	To improve ability to get a long with others
25 20	- (		To obtain a certific — e or degree — To complete courses necessars	or or	٠.		Leele are skills that will enrolly
27	76.		to transfer Le complete coarses necessary	50	٠,٠		To learn skills that we couch may the latte
28	7 [)		to transfer Other (Academic Cal.) is	141	`:		Lo develop ability to be independent self re? and and
211	7 D:		Other (Academic Casals				odaptable
30	7 I 7 F •		Teadiscover my conservations. Teadiscover my corese activities.	•.1	* 3 *		To develop ability to be independent, self-reliant, and
1.*	- 1		To tormulate long terms are er				adapte <sup>r</sup> de
			plans and or go do	10,7	7.1		Orner (Personal Development and Funchment Goals
33		Student Goais	lectormulate long term career plans and cogoals	6.1	-1.		Other (Personal Development and I michinent Goals)
1.1	~ ( ,	i i	To prepare for a new career	1	8	_ 5 ,	
45	(,)	Ť	To prepare for a new categor	1	23	Ranked Importance of Goals	Second Stost Important, goal
36	* H	~	The first the first transfer and tra	1.0	25	2 E S	Third Most Important, goal
17 18	711		Other (Career Preparation Cooks To improve robic areer related	٠,٠	•	= -	. Itimate degree sought while afterion, ear college.
			knowledge stills and or comparences	15.3 14	i tet		Major or area of study
<b>(4)</b>	<del>-</del> 1.		Lo improve job career related	1	:1		Was our college your first. Soice
			knowledge skills and or competences	1	1111		It no what kind of college was a year first choice?
30	7.1		To increase chances for a raser and or promotion	٠:	1,1		Mhen you lett our college what was your overall guide point
-41	1.		form rease chances for a raise and expromotion	٠,			average (CPAP) Paman, enrollment status while
42	"		Other Info or Career Improvement Goals:	-6.	; ;		attending our college  A.E. exon were entolical how
43	* 6.1		Other (Job. or Career Improvement Coals)				many hours did you normally so where lasses were being held?
44	71		To become actively involved in studes: lite and campus activities		15.		Delyon apply for fineword assistance (loan or scholarship) while at our college?

Note. Asterisk identities responses concerning whether or not respondents leed they are achieving or have achieved the goal



## Card 2—Former-Student Questionnaire for Two-Year Colleges and for Four-Year Colleges and Universities

lumos	ltem Number	1	Description	Columns	Hem Number		Description
19			Student ID number	;~	18	Γ	Admissions
10			Card number 2	82	14		Regulation on
11	16. 5		Achanermy as ademic goals	304	18		Business office
12	16. B	1	Transferred to another college		18	1	Academic advising
11	16.6	i	Needed a break from college	1:	18	1	Candance coanseling and testing
14	16 D	į	Courses programs I wanted were not available	1.7	1.1	1	Reading writing math and tody skills map exement
15	100 1	1	Despitation with a casodemic	:		1	Latoring
. ,		1	performance	; ;;		1	Meaont, attair.
14.	11.1		Dispetist och with the operation	1.		5	College cultur d programs
			of the establish				Ke, wation and athlete program
1.1	1	1	Dissipation of water to be		•	<u> </u>	Emancedaid
		i	Charles and Charles			valuation of Service	Student employment
1 .	1	:	Control Anna Control Control	1	1.4	atr	C. complanium
1.0	; i.		the second of the second		:	무	legalecement
×11	'+		Clinia	İ		ú	Horizing sets con
200	11 -		District Control of Control	1	* ,		Catchine
		<u> </u>	i gravitatagin ge		11		The althorizates
	77.1	3	transportant organization to	1	10		Latenta
		Reasons for Le	and the second of the second o	1			It hald care
. :	266.57	7	n de la companya de La companya de la co	: ''			Beach states
. :	.,.,		grange to a company of	and the second	10		
	+, + +		Street Control of the	i	:		Parking:
			New york of the second second		·.	•	Compersor and
			464				1.311.4
.*	* 2		en e	1-1	2000		Do you corrently have plans to additional education?
25	166.61		The work of the control of the work.  The control of the control o	: ***	*1		<ul> <li>If you can led responses 2 or 3 preases write in the name of the width grayou plan to afterward.</li> </ul>
. ' •	1		Lange the second	•			attending
1.	** 1 · ·		in the state of the second		20		[Additional question 1
	٠,.		A separate production of the contraction	,	23		Not blumal question 2
			har contract				Act litional question 3
۲.	56.5		Law post of				Additional question 4
: :	16.5		Lorina			i.	
1.4	1 -	tare tare e				 بز	•
1,	1 -	Physical Control of the Control of t	and the E. William of the least	1	, 1 , 26	,	· ·
1,	6.1	Rank Importa	King St. Hong Start	ļ		Additional Ouestion	Additional question 8
			h			a a a	Additional question 9
				1 671	77-	<u> </u>	Additional question 30
						Ē	Additional question 11
						Add.	Additional question   12
					•	••	Continue (Liverage 1)
					••		Additional question 13
				:	1.1		Additional question 14
					1.4		Addition diquestion [15]



### Card 1—Recent-Alumni Questionnaire for Two-Year Colleges and for Four-Year Colleges at d Universities

Columns	Item Number		Description	Calumns	Hem Sumber		Description
1.9			Student ID number	<b>;</b> .	1.	1	to become actively involved in
10			Circlinumber 1			4	student life and campus activities
11	1		Sex	:•		;	To rease participation in and of air dissocial events
12	:		Racad offmic cortegets	¦ ;·	133	}	form wase participation of
1.1	1		Ngertange	ì		i	culture, and social exents
1-1	.1		Manifol Cates	1.1	15.	!	Logranic progate
15	5.0	.	Sec	4.0	* *,*	ļ	Transect people
14.	• 1	5	hes restricted mediaty		•		Other Second and Cultural
1 -	• -	Harxlicap Stat	very restricted bearing	1		İ	Pa Supation Cooks
175	, !	5	Yes restricted esson	1 .:	1.1	!	Other Social and Cultural Participation Coalsi
19	1.4	e e	Yes bur prefer no to record	į .		•	To a reaso self-contabator
20	') 'i	-	Other	1.2	1 411	1	Tarbereses sed confidence
.11	F <sub>2</sub>		How long at this college?				
22			Teamerea expossibility or far for	•			To approve leader hypothils
			standing in an aradenies to be		C)	3	To emprove acadership skills
. ; ;	*		Teen i reasars now a dige or di ander standing mian acodernis (tell)	;	<b>1</b> .	<u> </u>	To improve at little to get all ng i with others
24	• .		Loobtan a certificate es degrees	, , ,	. ř .	Œ.	To amprove and its to get along
25	* B		Exobtama centro deserviegem				with others
26.	• (		To a complete control to the sector.		•		To learn skills that wile one book over daily life.
•	• (		ica e mplete concise processity.	† · · · · · · · · · · · · · · · · · · ·	• . •		teoleannskill, treit will ennich ing daily lite
141	- []		Other Accidents of the				Traditional control to the
.25	-1,-		t Place Accelerance				andependent wilt relain und
	- 1		Participation of the state of the				ad quarde
			paraturi (1930) angas are is La paraturi (1930) angas are is niterioris s				Literdevelopeahidity to be Literated and self-reliant and in
•1			Fortomickato for a tierror core of				Ladacable
1.'			Leans and or a lab	٠.	* *		curse Personal Development - continuation of Casals
::	.1.	Student Goals	To formulate or giften subset blans and or goal	1 .	• ; .		Coher Personal Development
1.4	·	ž	The programme to a reconstraint				Land fine content Conds
3 .		뒁	Trapped metro a new career	. ;		Ranked Importance of Goals	Most Important (50)
31,	111	Stu	Officer Carrier Propagator Carry			S g B	Second Most important agoal
١.			Office a green Proporate School	1.0.		a, ∰ .e	Litterd Start Important (goal)
13			Liver transportable areas received		1		The strategies of the strategies of expression
			En saledge Entranti				territoris
			compaters in	, , ,	•		Major or are seen to be
	. 1.		Lampiese ad career to ten.  Inneshedae 17's under		:.		Automotic leginers, sanda ir.
			enterwhere the second of the s		1.		Entensing of continuations recommissions taken to one of the
.211	- ;		Lamerease chances to a case	į			response around study
-			an forprice, auch	,			8 m + port pretting program at
41	1.		Touring and the constraint of a first of a f				<ul> <li>Olege have you employed it is easther college?</li> </ul>
1.1	٠,		Instruction of Const	٠.	• :		Abythed of college dates:
	.,.		Coher lob of Caree				crospen er om Alesper
1,			Improvement Coul.	٠,			The state of the s
::	* 1		A Laboration of the by the factors of the	1			*

Note: Asternal identifies responses concerning worth cross on property to other and here is early work to work the great



# Card 2—Recent-Alumni Questionnaire for Two-Year Colleges and for Four-Year Colleges and Universities

	Item Number	Description
10	· <del>-</del>	Student ID number
10		Card number 2
11	1.	How well did college prepare you tot your a bilitional college work?
1.	18	Did ye a transfer any credits from our college few aid your additional college world.
1:	14	Are your carrently employed
14.15	(1)1.	Category of current job
10	.'1	After completion of program at college how long tid you look torwork better obtaining your test ob?
1 .		How did you find your first job?
iz	÷	rtoxyyoth fa so a college college year aryona tawyote
***	24	What is was your annual salary or wages in your first Job?
20.0	.* \$	To what except is was your first job related to your major or area or study at our college?
··	9.	it we contently are not employed to are not working to a sob relation to cour matter or area of study at our college, which of the talk we capplies?
		AV end y ewilling to move to another commanity to work in a self-related to your major of area of study?
	.'8	Additional question 3
	.0	Additional question 2
	· '	Adda condequestion 3
1.	,	Additional question 1
		Additional question
	*	Adam and question o
		Additional mestion 7
	;	Additional question 8
	1:	Additional question 5 Adam and prestion 5 Additional question 7 Additional question 8 Additional question 9 Additional question 9
	30	Additional question 40
		Additional question 11
	1.3	
1.4	ţ+ 2	
1	10	Additional question 13
34.	41	Nechtional question 14
	1.7	Additional question 15



### SOIS ORDER FORM

'lease send me the following SOIS materia	als:   Send materials to:						
Questionnaires—\$10/hundred or 10¢ each	Name						
2-year series 4-year series	Title						
QUANTITY TITLE	Department						
Entering-Student Questionnaire	: Institution						
Continuing-Student Questionna	nire Address						
Program-Completer and Gradu Student Questionnaire	ating City State Zip.						
Former-Student Questionnaire							
Recent-Alumni Questionnaire Handbook: \$7/copy	Payment Enclosed (Please make checks payable to NCHEMS)						
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