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ABSTRACT

Guidelines for using questionnaires/findings provided through the Student-Outcomes Information Service (SOIS) are presented. SOIS provides institutional decision-makers with information on student characteristics, backgrounds, attitudes, reasons for making various educational choices, activities, educational plans, occupational choices, and subsequent achievements. The six instruments of the SOIS questionnaire series are administered to student populations at different points in their college careers. The guidelines cover: administering the SOIS instruments, including the design of local questionnaire items; procedures and costs associated with different methods of administering the questionnaires; use of the SOIS Questionnaire-Analysis Service, with explanations of the computer-generated reports provided by the service; issues involved in interpreting questionnaire results and integrating SOIS results with other institutional data; and ways in which SOIS results can help in institutional evaluation, review, and decision making processes. Appendices include: the two- and four-year college questionnaires, samples of local questionnaire items, output documentation of the SOIS Questionnaire-Analysis Service, and sample reports from Student-Outcomes Assessment Surveys. (SW)

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Student-Outcomes Questionnaires:

An Implementation Handbook

Second Edition

Peter T. Ewell

1983

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 questionnaires provided by the NCHEMS/College Board Student-Outcomes Information Services (SOIS). It also presents a set of procedures for using the questionnaire response-analysis service that is provided as part of the SOIS program. The *Handbook* is intended for use by researchers working in the area of institutional student-outcomes assessment; by administrators and faculty members concerned with program planning, program evaluation, and institutional self-study; and by other practitioners interested in obtaining information about student outcomes for decisionmaking purposes.

This second edition of the *Handbook* is greatly expanded and emphasizes not only the ways in which student-outcomes information can be collected and analyzed but also the ways in which it can be most effectively used. A new questionnaire—the Long-Term Alumni Questionnaire—has been pilot tested and added to SOIS, and is included in this edition of the *Handbook*. It is our hope that this edition of the *Handbook* will serve as more than simply a set of instructions on how to use a particular range of questionnaires. Consequently, we have attempted to provide guidelines that are applicable to effectively utilizing and integrating student data of all kinds from many sources.

Many people have helped make this second edition possible. First, the authors of the original edition (Robert G. Gray, Edmund Jacobson, Sidney S. Micek, Cathleen Patrick, Nancy Renkiewicz, and William Van Dusen) provided a solid

foundation upon which to build. Much of the original text has been changed, but there is also much to be acknowledged. Jana Matthews and Dennis Jones of NCHEMS and Darrell Morris and Sue Watts of The College Board reviewed the manuscript and provided helpful suggestions. Joan Knapp and Mary Hey provided editorial assistance, Clara Roberts supervised production, and Paula Dressler, Cindy Dempster, and Fran Huth typed the manuscript. Paula was especially helpful in making final changes to the manuscript.

Introduction

As institutional resources tighten, college and university administrators at all levels are growing more concerned about demonstrating and improving the impact of their programs on students. An increasing demand for information on what has been termed "student outcomes" is a result of this concern.

This growing demand for student-outcomes information arises both from within and from outside the institution. Institutional researchers and planners need information on student enrollment and behavior patterns in order to accommodate changing trends in programmatic enrollments and in the demand for particular student services. Department heads and faculty need to know the planned major fields of newly-enrolled students, their motivations, and their perceived educational needs in order to plan and deliver effective academic programs. Institutional fiscal managers need to be able to forecast future enrollment patterns and the reasons behind them in order to plan effective resource allocation and reallocation strategies. Heads of student service units need to know the level of demand for particular services and the degree to which existing services meet perceived student needs in order to plan new programs and reevaluate old ones. All are vitally interested in the percentage of students who leave college and why.

In addition to these internal demands for outcomes information, most institutions are facing escalating external reporting demands. Those institutions participating in federal (and most state) student-aid programs must provide information about retention and program completion to prospective students. Trustees, central governing boards, and state planning commissions frequently request (or require) information about program utilization, degrees granted, and the subsequent

success of graduating students. And increasingly, state legislators faced with difficult funding decisions are requesting information on the impacts of programs and institutions paid for with state dollars.

Finally, students and prospective students are themselves asking for information on the employment and postgraduate educational experiences of recent graduates in order to help them choose which institutions to attend and which major fields to consider. Increasingly, as a result, outcomes information is being used by institutions as a tool for recruitment.

Only a fraction of this growing demand for information on student outcomes can be met by regular institutional administrative and enrollment records. Most must be obtained by surveying or interviewing students. Because of this, many institutions have tried to develop local questionnaires and interview strategies to meet the need. But considerable time, money, and staff are required to develop a framework for organizing a data-collection effort, to design the necessary instruments, and to integrate the data gathered into understandable formats for institutional decisionmakers. Even when these difficulties are overcome, there is an implicit waste of resources in the duplication of effort when different institutions (and often different departments and units within the same institution) spend time and money for similar research efforts. And most likely, the data obtained from a specific local source will not be comparable with that obtained by another institution using a different instrument or data-gathering methodology.

An effective and efficient alternative to developing local survey questionnaires and interview guides is to regularly administer pretested standardized instruments that collect the kinds of information that have proved most useful to institutional managers and for which an analysis framework is available. Student-Outcomes Information Services (SOIS), jointly offered by the National Center for Higher Education Management Systems (NCHEMS) and the College Board, has since 1978 provided this support to higher-education institutions by offering:

- A plan for collecting student-outcomes data and for integrating these data with other institutional data to form an effective information base for management decision
- Guidelines for conducting different kinds of outcomes studies to obtain cross-sectional or longitudinal data on different populations of students
- A set of six standardized questionnaires for conducting surveys of different student populations
- A questionnaire-analysis service that provides the institution with timely, easy-to-use, computer-generated analytical reports of questionnaire responses
- A distinct set of questionnaires and analyses specifically designed to meet the needs of community colleges and junior colleges, and another especially developed for four-year colleges and universities

To date, institutions across the country have purchased more than 400,000 SOIS questionnaires for administration to their students. For these institutions, SOIS has proven to be an easy-to-use and cost-effective method for gathering increasingly needed information on student outcomes. Furthermore, these institutions have found the information collected by means of SOIS to be a permanent resource. Rather than simply providing answers to immediate questions of interest to decisionmakers, the information collected by means of SOIS may be used on an ongoing basis as particular questions arise. Resources devoted to a sound data-collection effort are thus less an expenditure than an investment.

For institutions using or considering SOIS, this *Handbook* is intended as a general guide to administering SOIS questionnaire instruments and to using the services provided through the SOIS Questionnaire-Analysis Service. Questions addressed in this and subsequent chapters of the *Handbook* include the following:

- What are student outcomes and what is the proper place of student-outcomes information in higher-education management decision-making?
- What specific kinds of students and outcomes do the SOIS questionnaires study, and how do the different questionnaires fit together?
- How can an effective student-outcomes data-gathering plan be developed at an institutional or departmental level?
- What specific alternatives are available for administering SOIS questionnaires to students, and what are the costs and benefits of different approaches?
- How can the questionnaire-analysis service be most effectively utilized, and how should the results be interpreted?
- How can resulting student-outcomes information be most beneficially used in institutional decisionmaking, and in what specific decision processes is it most effective?

What Are Student Outcomes?

There are numerous conceptions and definitions of the term "student outcomes" as related to the process of postsecondary education. Perhaps the most general approach is to define a student outcome as any consequence of a student's enrollment in a given educational institution and involvement in its programs.

Within this broad definition, a number of distinctions among types of outcomes can usefully be made. Astin, for example, has presented student outcomes in terms of a fourfold conceptual scheme on two dimensions (Astin, Panos, and Creager 1967):

FIGURE 1.1

CLASSIFICATION OF STUDENT OUTCOMES BY
TYPE OF OUTCOME AND TYPE OF DATA

DATA	OUTCOME	
	AFFECTIVE	COGNITIVE
Psychological	Self-concept Values Attitudes Beliefs Drive for Achievement Satisfaction with College	Knowledge Critical Thinking Ability Basic Skills Special Aptitudes Academic Achievement
Behavioral	Personal Habits Avocations Mental Health Citizenship Interpersonal Relations	Career Development Level of Educational Attainment Vocational Achievements: Level of Responsibility Income Awards or Special Recognition

SOURCE: Alexander W. Astin, R. J. Panos, and J. A. Creager, *National Norms for Entering College Freshmen Fall 1966* (Washington, D.C.: American Council on Education, 1967): p. 16.

Educational measurement has traditionally concentrated upon the *Psychological/Cognitive* cell of this classification. Indeed, academic achievements as assessed by such indicators as grades and rank in class are probably the most commonly recognized outcome statistics in most institutions. General aptitude, aptitude and achievement in particular knowledge and skill areas, and basic skills competence are commonly assessed by means of a variety of standardized tests. These are commonly used both to establish entrance and placement criteria and to assess educational impact or growth after completion of a particular program of study.

Psychological/Affective outcomes are somewhat more subtle and consequently more difficult to assess, but they are no less important to institutional decision-makers. Proponents of liberal education, for example, feel strongly that academic programs should be evaluated not only on the basis of the skills students possess upon graduation but also upon the kinds of attitudes that they hold. Of perhaps more immediate importance to institutional decisionmakers, such factors as self-perceptions of achievements and psychological lack of fit between the student and the institution have been shown to be strongly correlated with student attrition.

Behavioral/Cognitive outcomes are most often assessed in terms of career development and subsequent educational attainment. The degree to which students are prepared for entry into and progress in various occupations and the degree to which they are prepared for postgraduate study can be of considerable value in assessing and improving an institution's array of programs, as well as in

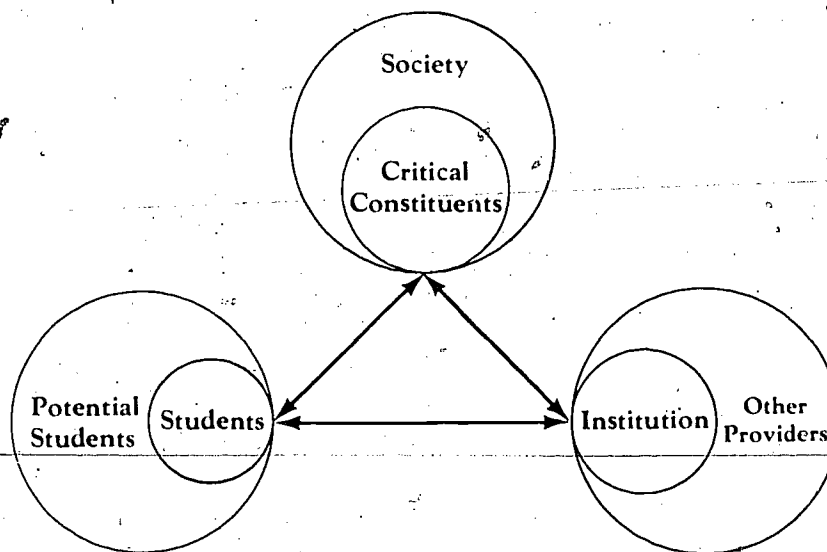
planning new programs. Furthermore, such outcomes are increasingly important to recruitment and for public relations.

Behavioral/Affective outcomes are perhaps the least assessed and are probably the least directly related to institutional decisionmaking. Most often, these are long-term and are of more interest to researchers than to decisionmakers. For those institutions whose missions claim the full development of students as individuals and as effectively functioning citizens, however, assessment of such outcomes remains an ultimate test of success.

A second major way of classifying different kinds of student outcomes is to view outcomes in terms of the *interactions* among students, institutions, and particular segments of society. Such an approach has the advantage of placing student-outcomes information firmly within the context of other kinds of management information. For example, Dennis Jones proposes the following heuristic framework in terms of which to structure a management data base (Jones 1982):

FIGURE 1.2

BASIC ENTITIES OF THE SYSTEM OF HIGHER EDUCATION



SOURCE: Dennis Jones, *Data and Information for Executive Decisions in Higher Education* (Boulder, Colo.: National Center for Higher Education Management Systems, 1982): p. 38.

Data on outcomes appear in this framework in two ways. First, an outcome may consist of a *change of state* within one or more of the basic entities represented. Learning gains, attitude changes, and skills development, for example, are all changes in state in the entity "students" occurring as a result of an educational program. Secondly, however, an outcome may consist of a *change in the relationship* between two entities. Dropping out of a particular institution as a result of a negative experience, for example, represents a change in the relationship between

the student and the institution. Finding a job as the result of completing a certification program represents a change in the relationship between a student and a particular critical constituent (in this case, an employer).

The primary advantage of this approach is that it classifies different kinds of information in comparable terms. Information about students is but one portion of the information needed to inform an effective institutional management decision, for example, the decision to offer a new degree program. Information on student outcomes must be integrated with information on the demand for the program (the characteristics of potential students), with information on support for the program (the relationship between the institution and employers), with information on major competitors also offering the program (the characteristics of other providers), and with information on the current ability of the institution to supply the program (the resources of the institution). The challenge to the institutional manager is to gather and utilize information on student outcomes and to do so in a manner that allows this information to appropriately inform decisions in the context of other kinds of information.

Cutting across such basic classifications of student outcomes are a number of other outcome dimensions:

- Outcomes may be either *short-term* or *long-term*, depending upon their persistence over time and upon the length of time after graduation or completion that it takes for the outcome to appear. Although long-term persistent outcomes are often claimed as the benefit of higher education, most decisionmakers are primarily concerned with the assessment of short-term outcomes. This concern is appropriate both because of the difficulties involved in collecting data on long-term outcomes and because such outcomes can rarely be linked back to explicit factors over which institutional decisionmakers have some control.
- Outcomes may be either *subject-aware* or *subject-unaware*, depending upon the degree to which the student is conscious of the outcome. For example, a student's own perception of growth in a particular academic field may have little relation to actual levels of achievement. Institutional decisionmakers will be primarily concerned with subject-aware outcomes, both because of their relative ease of measurement and because they are most directly related to student choice of institution, choice of program, level of effort, and persistence.
- Furthermore, outcomes may be either *direct* or *indirect* depending upon how closely they are causally connected to an educational program. For example, a direct educational outcome is a student's acquisition of new facts and skills as a result of attending a particular course. Conversely, an indirect outcome may be a particular student's increased interest in civic affairs, stimulated in part by participation in student government while in college.

- Finally, particular outcomes may be either *intended* or *unintended* consequences of particular programs. An unintended consequence of an effective two-year baccalaureate transfer program at a community or junior college, for example, may be successful transfer to a four-year institution well before completion of the program. While institutional decisionmakers appropriately concentrate upon the assessment of intended outcomes, a sensitivity to unintended outcomes can often yield particularly useful information.

Many other distinctions can be made among different types of student outcomes. Some are easy to measure (the earning of a degree); others are more difficult to measure (improvement in the ability to think critically). Some outcomes involve changes in student knowledge, skills, attitudes, or activities; others preserve student knowledge, skills, attitudes, or activities. Interested readers are referred to the bibliography, which contains a list of major recent works on the concept and assessment of student outcomes.

What Students and Outcomes Does SOIS Cover?

The primary emphasis of SOIS is on providing information of immediate use to institutional decisionmakers. Given this emphasis, the SOIS questionnaires are designed to provide data on outcomes that are largely psychological/affective (student attitudes and satisfaction) or cognitive/behavioral (placement and job success) in Astin's fourfold typology. Other than self-reported gains, SOIS does not attempt to measure changes in actual student skill levels or achievement. Nor does it attempt to assess such generalized educational impacts as improved citizenship or interpersonal relations. Furthermore, SOIS concentrates on assessment of those short-term outcomes that have a good possibility of informing changes in individual institutional programs. While the newest instrument in the SOIS questionnaire series (The Long-Term Alumni Questionnaire) probes outcomes from three to five years after graduation, the other five instruments assess immediate impacts of the institutional experience.

In general the objective of SOIS is to provide institutional decisionmakers with immediate, practical, and usable information on student characteristics, backgrounds, goals, attitudes, satisfactions, reasons for making various educational choices, activities, educational plans, occupational choices, and subsequent achievements. The six instruments in the SOIS questionnaire series, described below, are designed to be administered to student populations at different points in their college careers, and all are available in distinct versions for two-year and for four-year institutions. A key feature of the questionnaires is that all six contain a common set of core questions, enabling direct comparisons to be drawn between different populations of students or between different points in the college careers of the same body of students over time.

SOIS survey instruments have also been designed to allow each institution to add up to fifteen questions unique to the institution, system, or state. In this way, college and university administrators can collect standardized comparative data about their students at the same time that they examine particular institutional or statewide problems not addressed by the standard questions.

Particular types of data collected by each questionnaire in the SOIS series are described briefly below:

1. *Entering-Student Questionnaire.* Administered to students as they first register at the institution, this questionnaire provides a baseline of data on demographic characteristics, educational and occupational experience and plans, sources of financial support, goals, and reasons for selecting the institution. It can provide a valuable data supplement to the information routinely collected through admissions procedures.
2. *Continuing-Student Questionnaire.* Administered to students as they reenroll each term and to students who reenroll after being away from the institution for a term or more, this instrument collects data about student characteristics and backgrounds as well as information on students' current and long-range goals; employment status; and need for, use of, and level of satisfaction with the services provided by the college.
3. *Former-Student Questionnaire.* This instrument is administered to students who leave the institution without formally completing a program or receiving a degree or certificate. In addition to demographic and background data concerning students' experiences and progress at the institution, the questionnaire provides detailed information as to why students did not return (both positive and negative reasons) and their level of satisfaction with various institutional services.
4. *Program-Completer and Graduating-Student Questionnaire.* Administered to all students who are about to complete a program or earn a degree or certificate, this questionnaire provides demographics, background data, and information on students' level of satisfaction with various institutional services as well as student ratings of how well the institution helped them reach their goals. Information about students' future educational plans is also collected.
5. *Recent-Alumni Questionnaire.* Administered from three months to a year after a student's completion of a degree, certificate, or vocational program, this questionnaire provides demographic and background data on students' progress at the institution as well as considerable detail about the first degree program that students enrolled in after graduation and the first full-time jobs they held after leaving the institution.

6. *Long-Term Alumni Questionnaire.* Administered from three to five years after a student's completion of a degree, certificate, or vocational program, this questionnaire provides demographic and background data about students' enrollment at the institution and considerable detail about postgraduate educational and full-time job experience.

All six 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 about a specific problem, such as student retention. With periodic administration of these questionnaires, an institution can measure the progress of its students and assess the relative impacts of various educational and service programs. Data obtained from longitudinal outcomes studies can be compared to the results of previous studies of the institution's students, as well as with similar data obtained from other institutions using the SOIS questionnaires. Normative data reports (entitled "Program Profiles") are currently a part of the SOIS Questionnaire-Analysis Service; these enable an institution to directly compare the responses of its students to those of students at other institutions.

Each questionnaire in the series is designed to provide the most important and appropriate information colleges and universities want at a particular time. For example, information about student satisfaction with various college services is included on the Continuing-Student, Program-Completer/Graduating-Student, and Former-Student questionnaires because student feelings toward and attitudes about these services are particularly timely. These questionnaires contain few questions about student postgraduate occupational and educational plans because many students at this point in their college careers have not yet finalized their plans. The Recent-Alumni and Long-Term Alumni questionnaires, on the other hand, are intended for students who have been away from the institution for one to five years. These questionnaires include relatively few questions on student satisfaction with college services; instead, they concentrate upon postgraduate educational and occupational experiences.

Generally, institutions will find SOIS instruments most valuable if they are viewed as part of an integrated data-collection *system* rather than as a set of "one-shot" data-gathering instruments. Institutions that have made the best use of SOIS results have done so by integrating the data obtained from various SOIS instruments into a single student-outcomes data base. Whether such a data base exists in the form of computer tapes of responses or in the form of hard-copy reports from the SOIS Questionnaire-Analysis Service, analyses may be conducted as needed and as particular institutional questions arise. Furthermore, treating SOIS results as part of an ongoing data base emphasizes the need to combine data obtained by survey with other kinds of institutional data—enrollment reports, tracking statistics, and replacement data, for example—to investigate a particular local problem. Writing a report on the results of a particular SOIS survey should be seen not as the end point of outcomes information utilization but as the beginning.

How Were SOIS Questionnaires Developed?

The measures included in SOIS were developed 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- and four-year college and university educational outcomes. Two surveys (Micek and Arney 1974; Romney 1978) that assessed the relative importance of various outcomes measures to different types of institutional decisionmakers were also 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, which 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 the initial series of five questionnaires took place in 1977, and as new questionnaires are added to the series, each is thoroughly pilot tested at both two-year and four-year institutions. 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, each questionnaire is reviewed by students and former students to enhance the reliability and validity of the instruments. Finally, institutions using the questionnaires are periodically surveyed to detect problems, and several adjustments in the wording of particular questionnaire items have been made as a result of user feedback.

How Are SOIS Results Used?

Surveys of users of SOIS have also revealed that institutions have used questionnaire results for many different purposes. Most frequently, SOIS results have been used to improve institutional functioning and decisionmaking by providing information on the impacts of particular programs and services.

Improvements can occur in a variety of ways. Student surveys can provide information that suggests the need for *particular institutional or program changes*. A study of recent alumni or program completers, for example, may reveal that students from certain programs have difficulty getting accepted in more-advanced educational programs. An attrition study may reveal that a disproportionately high number of those who dropped out were concentrated in certain academic programs and that most left because of dissatisfaction with their major field. Each of these findings may suggest the need for particular program changes.

Outcomes studies can also 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 permit, 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 agencies that the college was performing a useful community service and that a 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 in 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. Combined with other kinds of student data, student-outcomes information can help detect changes in attrition levels, choices of major field, student attitudes, satisfaction with institutional services, decisions about further schooling, and job availability. 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.

Conclusion

The remaining five chapters of the *Handbook* will provide guidelines for designing, implementing, and using the results of a student-outcomes data-gathering effort using SOIS. Chapter 2 presents some guidelines for developing a student-outcomes data-collection plan and covers issues of scheduling, study design, and sampling. Chapter 3 presents guidelines for administering the SOIS instruments, including the design of local questionnaire items, and covers the procedures and costs associated with different methods of administering the questionnaires to students. Chapter 4 presents guidelines on how to use the SOIS Questionnaire-Analysis Service and includes full explanations of the computer-generated reports provided by the service. Chapter 5 covers issues involved in interpreting questionnaire results and integrating SOIS results with other institutional data to address particular institutional problems. Finally, chapter 6 discusses some of the many ways in which SOIS results can be used to inform institutional evaluation, review, and decision processes.

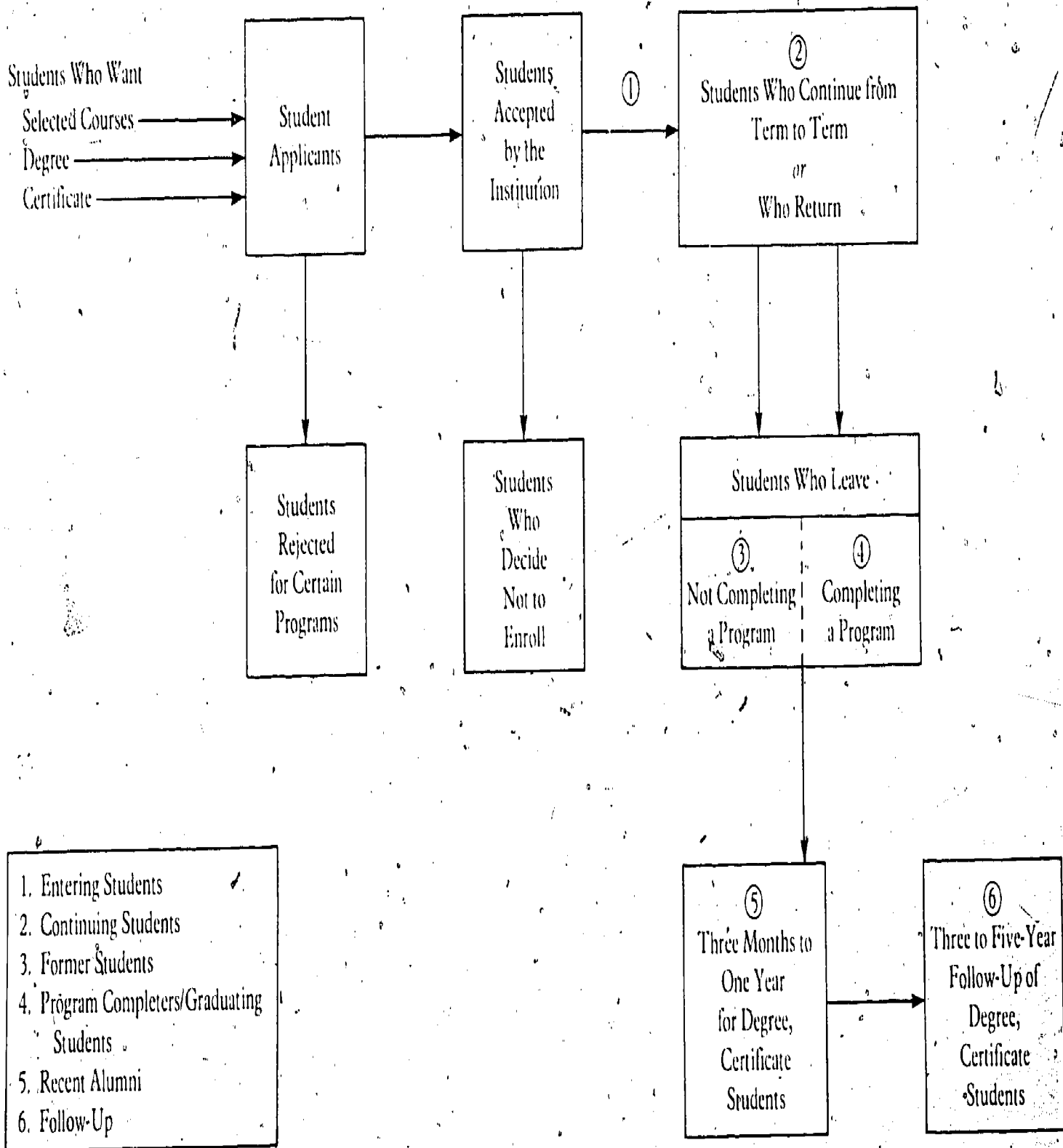
Developing a Student-Outcomes Data-Collection Plan

Because institutions differ widely in both their need for information and in the resources available to support a data-gathering effort, there is no single best plan for administering SOIS questionnaires. Rather, each institution should develop its own appropriate data-collection plan consistent with what it needs to know about student outcomes, how often it needs to know it, and what kinds of resources it can devote to gathering data and to interpreting the results.

Many colleges need to know not only about student attitudes, activities, and plans at particular points in time but also about changes over time. For example, institutions that need information only about why certain kinds of students are dropping out may 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. SOIS questionnaires are intended to be used in 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 to see how they change over time—a longitudinal survey plan. The questionnaires can be used to support any appropriate combination of the two plans—for example, tracking a sample cohort longitudinally, but cross-sectionally surveying all graduates and dropouts.

FIGURE 2.1

STUDENT-OUTCOMES DATA-COLLECTION POINTS FOR COLLEGES AND UNIVERSITIES



- 1. Entering Students
- 2. Continuing Students
- 3. Former Students
- 4. Program Completers/Graduating Students
- 5. Recent Alumni
- 6. Follow-Up

Student Flow and SOIS Data-Collection Points

A number of recent studies of attrition and retention have stressed the importance of modeling college and university enrollments as a continuous "flow" or "pipeline" extending from admission to graduation (Rumpf 1978). Students enter the pipeline through various processes, such as admission, readmission, and transfer, and leave it through graduation, withdrawal, dismissal, and transfer.

Figure 2.1 illustrates the typical flow of students through colleges and universities and shows the six data-collection points covered by SOIS instruments:

- As a student enters (for a certificate or degree program, or for selected courses)
- While a student is enrolled
- 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 speak 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 situation indicates the importance of distinguishing between former students and graduates or program completers, and of carefully following up both. Indeed, the term "dropout" itself is often suspect as students withdraw from an institution. Students may indeed be leaving higher education with a sense of frustration, but they may also be leaving a particular institution to complete a degree at another, or they may have fully met their educational goals and have successfully obtained employment in the field for which they have been trained. Surveying former students may thus reveal as many institutional "successes" as perceived institutional "failures."

Not all information collected at the six stages should be considered outcomes information in the sense of effects on students caused by the institution. Rather, 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, of course, are flexible. Some institutions may not need or may not want to survey students between the time they enter and graduate. Others may want to add an additional data-collection point.

Assessing Information Needs and Developing Research Questions

As defined by A.N. Oppenheim (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 relationship 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 a critical need in any survey effort is to develop a clear definition and understanding of the objectives of the survey. The first step in this process consists of identifying the 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 it is accomplished, all of the remaining steps in the survey process are means to an end and will flow logically.

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 what constitutes the acceptable indicators of these concepts.

- *What assumptions will be made?*

It is impossible to completely control all elements of a 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 both the survey process and interpretation of the survey results.

Consideration of both of these questions will not simply aid in the development of the data-gathering plan itself. If done effectively, it can also help the designers of

the survey to communicate to potential users of the results what the survey can and cannot accomplish.

In establishing the purposes of a survey, it is particularly important to obtain input from those who will use the findings. The larger the group to use the findings, the more diverse the objectives of the study will be. And 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, and to allow users to fully participate in this process.

The importance of institutionwide involvement in the design of a student-outcomes data-collection plan cannot be overstated. Many different institutional personnel and constituencies may have an interest in the development and results of a questionnaire directed at students and former students. Involving these interested parties in the early stages of planning a data-collection effort maximizes both the possibility that the data collected will be effectively used and that all offices and individuals will cooperate in the implementation of the data-collection process itself.

One vehicle for involving institutional staff and other interested groups is an advisory committee made up 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 additions to the questionnaire in the form of local items. Representatives from the offices of student services, alumni development, admissions, career placement, academic administration, vocational administration, data processing, and public information 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 and will ultimately facilitate effective use of the questionnaire results.

The involvement of a number of institutional personnel will also help to guard against overlapping activities in different areas within the institution. In many institutions—large ones in particular—redundant survey efforts are conducted by several offices, wasting time and money. Not only will early involvement of these offices in survey planning help avoid such duplication in the future, it may also uncover and share the findings of past survey efforts of which other offices may be unaware.

Once the objectives of the survey have been determined and the specific research/evaluation questions identified, an 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 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 entering the college in 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 may consist of different individuals. An example of a cohort-survey design is surveying the entire entering group of students in the fall term of 1980 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 assessment of changes in a group over time, neither indicates which particular students change; this can hinder attempts to explain why changes occur. *Panel designs* avoid this problem, since they involve the collection of data from the same individuals 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. Attrition of the students who compose the panel, for example, 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 partly 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 trend studies, see *Survey Research Methods* (Babbie 1973).

In all of the above designs, appropriate consideration should be given to integrating data obtained from SOIS questionnaires with other kinds of student data collected by the institution. SOIS instruments, for example, provide a way to directly tie responses to individual student record files through a student identification number. Even if this option is not used, and if student responses are anonymous, breakdowns of grade distributions, test scores, loads, and attendance/registration patterns by demographic groups can be effectively used in conjunction with SOIS results in assessing such problems as attrition. And as in any other element of survey design, it is best to investigate the availability and utility of this kind of data before the survey is implemented.

Administration Cycles: Scheduling and Sampling

Once decisions have been made regarding the research/evaluation questions to be asked and the survey instruments to be used, several important issues must be confronted. The first is scheduling—the optimal time of year to administer each survey instrument. The second is cycling—how frequently each type of questionnaire

should be administered. Finally, a decision must be made on whether to survey entire populations of students or whether a sample will be sufficient.

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.¹

The Former-Student Questionnaire should be administered as soon as students who have not returned can be identified. Many institutions may want to conduct only one former-student 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 an attractive alternative if an institution wishes to stagger the time of administration of the various surveys in the plan.

Finally, because many of the questions deal with students' first jobs or first college choices following graduation, the Recent-Alumni Questionnaire should be administered three months to a year after respondents graduate or leave college. The Long-Term Alumni survey, which asks for alumni salaries, highest educational degrees earned, and similar information is best administered several years after graduation, when graduates have begun to follow relatively stable career paths. Figure 2.2 summarizes these scheduling suggestions.

The second issue to be considered in developing a plan for routinely collecting student-outcomes data is that 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 administered 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 relevance to justify the cost and effort required to administer and process the questionnaires?

There are no definitive 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, conducting surveys so frequently is generally unrealistic. Surveys can be staggered effectively across several years if institutions remember that for most

1. While this questionnaire can be administered whenever appropriate throughout the year, certain times are less effective for obtaining student response; these include immediately before and after exam periods, holidays and vacations, and during special campus events. Administering the questionnaire late in the afternoon and late in the school week also should be avoided if possible.

FIGURE 2.2

SCHEDULE FOR IMPLEMENTING DATA-COLLECTION PLAN

Type of Survey	If 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 appropriate for the information being collected		
Program Completer/Graduating Student	Near 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 months 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 referenced
Long-Term Alumni	Three to five years after graduation when alumni have begun to follow relatively stable career paths		

purposes longitudinal data will be the most useful. Therefore, while most institutions will not want to administer every survey every year, the plan should encompass the need to survey the same students at several points in their careers. 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 cyclical plan such as is suggested by model 1 in figure 2.3.
- 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 2.3.

FIGURE 2.3

EXAMPLE SURVEY ADMINISTRATION CYCLES

YEAR	1	2	3	4	5	6
MODEL 1						
Entering Student	X	X	X	X	X	X
Former Student	X mid-term			X mid-term		
Program Completer		X			X	
Recent Alumni			X			X
Long-Term Alumni						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	
Long-Term Alumni						X

By first collecting data from entering students and then basing the rest of the data-collection cycle on these students, an institution will be assured of having critical baseline information available.

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 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 but administer the Continuing-Student, Program-Completer/Graduating-Student, and Recent- and Long-Term 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 nonreturning students.

Once the basic design is established, a sampling strategy must be developed. 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, there is no single right answer, and 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. Surveying the total population also eliminates the need to devise a technically sound sampling procedure to identify which individuals in the population are to receive the questionnaire. Finally, and most importantly, surveying the entire student population enables responses to be effectively broken down to the department or divisional level—the level at which they are often most useful to institutional decisionmakers.

Because administering questionnaires to all students can be costly, particularly for colleges with a large enrollment, some institutions are unable to survey all students. As noted earlier, one compromise is to survey all entering students to obtain baseline data and then to select random samples of students from the population for administering later surveys.

If an institution decides against a survey of the total population, 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) how many students are 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. An easy method for randomly selecting students using the computer is to decide on the percentage of students to be sampled and convert this percentage, say, 20 percent, to a decimal (.20). The

computer can then be programmed to generate a random number (uniformly distributed over the interval zero to one) for each student record as it is read. If the random number is less than or equal to the decimal, the student is included in the sample; if the number is larger than the decimal, the student is excluded from the sample. During the execution of this program, student records for those in the sample can be written into a new file for later use. This method can also be done also without the computer, using a table of random numbers.

Although not so reliable as a true random selection, many institutions approximate a random sample by selecting every n (th) name from a total listing of the student population to be surveyed. For example, if a 20 percent sample is required, the computer can be requested to pull every 5th name from the student-record file, or such a selection can be accomplished manually.

Other sampling plans can also be considered, for example, stratified random sampling, cluster sampling, and quota sampling. Quota sampling may be especially useful for an institution that wishes to ensure enough responses from a relatively small group of students to allow effective conclusions to be drawn. For example, an institution wishing to particularly investigate attrition among its minority students may want to survey *all* minority students but only a sample of nonminority students. It is important to stress that if quota sampling is used, a weighting procedure must be incorporated into the analysis to ensure that combined responses are representative of the total population. 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 rate as possible. One aim of every survey is to generalize from returned responses the entire population of students of interest. If 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 greater depth in subsequent chapters of the *Handbook*.

Guidelines for Administering SOIS Questionnaires

After an institutional student-outcomes data-gathering plan has been agreed upon, the next task is to determine the actual procedures to be used in administering particular SOIS questionnaires to particular bodies of students. Distinct steps within this task include determining the number of questionnaires needed, developing appropriate local questions to add to SOIS instruments, and establishing procedures for administering the questionnaires to different student populations.

Obtaining 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 Publications, P.O. Drawer P, Boulder, Colorado 80302, and requesting the type and number of each questionnaire needed. Individual questionnaires are available for purchase in bulk at a charge that covers the cost of printing and mailing. Questionnaires ordered in this manner will be shipped within five days of receipt of the order, facilitating rapid implementation of a survey effort. (See the SOIS order form included for specific cost details.)

The number of questionnaires of each type to be ordered depends, of course, upon the number of students of each population to be surveyed, according to the data-gathering plan established. But it also depends upon the strategy to be used in administering the questionnaire. If questionnaires are to be administered to

students directly—for example, at registration or in the classroom—the number of students surveyed is the number of questionnaires required. If a mailing strategy is used and a second mailing to increase the response rate is desired, approximately 50 to 65 percent additional questionnaires will probably be needed. In any case, it is generally wise to order about 10 percent more questionnaires than the population to be surveyed, to allow for loss, errors, and so on.

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 researcher 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

Developing Local Items for SOIS Questionnaires

The questionnaires developed for SOIS by NCHEMS and the College Board use standardized questions to collect information that is of interest to a wide variety of institutions and applicable to a broad range of 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 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.

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

1. The local items are developed. The response set for any single item can consist of no more than ten numeric responses. This restriction is necessary for purposes of keypunching and analyzing the responses to each item through the SOIS Questionnaire-Analysis Service.
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.

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, if the number of local items is small, the back of the cover letter can be used. Of course, in this case, comprehensible instructions must be given in the cover letter itself. 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 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.")

Figure 3.1 shows the spaces provided in each of the SOIS questionnaires for responding to locally developed items. Figure 3.2 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 C.

Alternatives for Administering SOIS Questionnaires

Some of the questionnaires in the SOIS series (such as the Former-Student, Recent-Alumni, and Long-Term Alumni questionnaires) can probably only be administered to students 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 often be administered to students directly by means of a handout procedure.

Handout procedures, by their nature, are most effective when an entire population is being surveyed. In instances where specific students have been selected as respondents through a sampling procedure, administration of questionnaires

FIGURE 3.1

EXAMPLE OF SPACE PROVIDED ON THE QUESTIONNAIRES FOR
ADDITIONAL LOCAL QUESTIONS

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.

- | | | | | | | | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |

FIGURE 3.2

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 many months has it been since you left 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 major or area of study while enrolled at our college? *Enter your response in box 20.*
- 0 Never declared a major or area of study
 - 1 Never changed my major or area of study
 - 2 One time
 - 3 Two times
 - 4 Three times
 - 5 Four 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.*
- 0 Entered or plan to enter military service
 - 1 Looking for a job
 - 2 Working in a job
 - 3 Caring for home and/or family
 - 4 Traveling
 - 5 Not doing anything
 - 6 Other _____

through direct handouts can become difficult, and mailing questionnaires to students may be more effective. If the sample has been drawn by computer from official institutional records, mailing labels can often be prepared at the same time the sample is drawn. Another alternative, feasible only with small samples, is to seek out the selected students directly and deliver or administer the questionnaires. This approach has many advantages, particularly if there is time to wait for the student to complete the questionnaire in the presence of the researcher.

In general, institutions should try to explore every opportunity to administer questionnaires directly, within the guidelines of their data-collection plan. Direct administration is cheaper than mailing because of the lack of mailing costs and the need to provide additional questionnaires for follow-up mailings to nonrespondents. More importantly, direct administration will generally yield a higher response rate than mailing. On the other hand, direct administration may be impossible or inappropriate in many situations and may run considerable risks of bias in the respondents obtained.

Administering Questionnaires Directly to Students. Where it is not necessary to assure that specifically identified 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 are available. One alternative is to give the questionnaires to instructors to distribute and collect during class meetings. If all students are required to take a certain class, a sample of class meetings can be identified, perhaps all of those meeting at 10:00 A.M. on Monday and 4:00 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 the 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 intrusion on time otherwise planned for study.

Institutions with advance registrations can send the questionnaire out with registration materials and request that 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 are probably excluded if this mechanism is used. Excluded may be the transfer student who does not apply for admission far enough in advance 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.

Institutions that require students to report for registration can use that contact to 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 can be 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 term 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 registering on one day and first-time students on another day) or time of registration (for example, students who are working registering in the evenings or on weekends or at lunch hour) does not bias the sample.

Many other such mechanisms for directly administering questionnaires to students can be developed at individual institutions. In each case, however, care must be taken to identify the possible biases associated with the administration method, and a decision must be made on whether the risk of bias is worth the savings in resources and the potentially higher response rates associated with direct administration.

Administering Questionnaires by Mail. 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 toward the answers. On the other hand, it permits the student total freedom to toss the questionnaire in a wastebasket. Also, if the questionnaire is administered anonymously, there is usually no way to tell how the group that returns the questionnaire corresponds to the overall group.

If an SOIS questionnaire is to be mailed to students or former students, the institution needs to follow several additional procedures to keep track of the survey. The initial mailing of questionnaires can begin as soon as the questionnaire, cover letter, envelopes, and address labels are assembled. To track questionnaires, a list should also be prepared in the same order as the address labels or typed addressed envelopes. This list can serve as a survey status list if prepared as shown in figure 3.3.

FIGURE 3.3

SUGGESTED FORM FOR LISTING OF SAMPLE AND SURVEY STATUS

NAME	ADDRESS	FIRST MAILING			Date Sent	SECOND MAILING		
		Undeliverable	Unusable	Usable		Undeliverable	Unusable	Usable

FIGURE 3.4

EXAMPLE OF LISTING OF WESTERN COLLEGE SAMPLE AND SURVEY STATUS

ID	NAME	ADDRESS	FIRST MAILING			SECOND MAILING		
			Undeliverable	Unusable	Usable	Date Sent	Undeliverable	Unusable
0122356	Mark 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 Harris	123 Table Mesa Drive Boulder, CO 80303			2/11			

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 3.4 shows a sample tracking sheet. If institutional records are computerized or if names and addresses of students are keypunched to produce labels, these tracking sheets can also be produced by the computer; otherwise they must be typed. The tracking sheet should contain:

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

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 [✓]) should be placed on each questionnaire as the proper information is recorded on the tracking sheets. Generally, responses to mailed surveys will peak quite quickly, and a decision can be made as to whether or not additional follow-up strategies will be needed. To save all returned materials (even undeliverable questionnaires) until the end of the survey is a good practice.

There is unequivocal evidence that follow-up activities do increase response rates in mail surveys (Etzel and Walker 1974; Hinrichs 1975; Wiseman 1973). Dillman (1982) and 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 cheapest and most straightforward follow-up strategy is to send a reminder letter or postcard reminder to nonrespondents. The reminder should be sent no less than a week after the peak of responses has been obtained and should stress the importance of a response, particularly if the student is part of a sample. The reminder should also offer to send a duplicate copy of the questionnaire if requested.

A second follow-up strategy is to send out a complete duplicate set of materials rather than a simple follow-up letter or postcard reminder. A study by Rossman and Astin (1974) in which respondents were 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.

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 out-of-pocket cost of this method is often less than a second wave of questionnaires and is almost certainly more effective.

Many combinations of such follow-up techniques are possible.

Cover Letters and Memos for the SOIS Questionnaires. Whether questionnaires 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, if possible, be signed by the president. Letters should:

- Convey the importance of a response from the student, especially if the student is part of a sample.
- State that responses will be confidential.
- Emphasize the value to the student of 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 questionnaire 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. If the student is part of a sample, the size of the sample should be stated and the importance of each response in obtaining a valid result stressed. (A sample cover letter is included as part of appendix F.)

Costs, Materials, and Personnel for Administering the Questionnaires

Figure 3.5 shows a list of materials required for the initial contact in mail and hand-out 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

FIGURE 3.5

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

MATERIALS	NUMBER**	EXPLANATION	ESTIMATED COSTS*		
			First-Class Mail	Nonprofit Permit Mail	Handout
Questionnaires	1,000	Estimated at \$.15	\$150.00	\$150.00	\$150.00
Cover Letters	1,000	Printed on official stationery (.06/sheet)	60.00	60.00	60.00
Return Envelopes (Size No. 9)	1,000	Business-reply return envelopes (a) Printing costs (.065 each) (b) Postage costs at \$.25 each × 300 returned	65.00	65.00	
Mailing Envelopes (Size No. 10)	1,000	Standard business size (.065 each)	65.00	65.00	
First-Class Postage	1,000	First-class commemorative stamps at \$.20 each	200.00		
Nonprofit Permits	1,000	(a) Nonprofit permits at \$.059 each		59.00	
First-Class Postage for Undeliverables		(b) Estimated 10 percent undeliverables at \$.25 each		25.00	
TOTAL			\$615.00	\$499.00	\$210.00
Per-Student Contact Costs			\$.62	\$.50	\$.21
Per-Student Response Costs (estimating 300 responses)			\$ 2.05	\$ 1.66	\$.70

*As of 1983

**Estimated costs for more or fewer than 1,000 students should be approximately proportional.

proportional in cost to those shown. Most costs in figure 3.5 are self-explanatory, except perhaps the first-class mailing expense. Research indicates that personalizing the survey materials increases the response rate substantially. In particular, studies show that using first-class postage, particularly commemorative stamps, is especially effective in increasing response rates (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 often justifiable. First-class mail has the added advantage of being forwarded by the post office. Hensley's research 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 to 3 percent less than the first-class postage on the initial mailing. Thus an institution should consider 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 addresses and to send out new envelopes, but for many colleges, extra staff time is more readily available than extra sources of funds.

Other mailing costs not shown in figure 3.5 are those required for either typing names and addresses of students on the envelopes or for generating and affixing computer-printed name and address labels. These costs vary depending on the institution but should certainly be included in cost estimates for the survey. At least one study (Carpenter 1974-75) showed that personalizing the cover letter by manually 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.

Costs involved in undertaking follow-up activities for nonrespondents will vary with the type of activity chosen. Figure 3.6 presents approximate follow-up costs for the three follow-up strategies discussed above, based upon a 35 percent return to the initial mailing. These costs should be added to those in Figure 3.5 to obtain an approximate cost for total administration.

FIGURE 3.6

ESTIMATED COSTS OF MATERIALS FOR TWO TYPES OF FOLLOW-UP MAILINGS TO 700 STUDENTS

MATERIALS	NUMBER**	EXPLANATION	ESTIMATED COSTS*	
			First-Class Mail	Nonprofit Permit Mail
Questionnaires	700	Estimated at \$.15	\$105.00	\$105.00
Cover Letters	700	Printed on official stationery (.06/sheet)	42.00	42.00
Return Envelopes (Size No. 9)	1,000	Business-reply return envelopes (a) Printing costs (.065 each) (b) Postage costs at \$.25 each × 200 returned	45.50 50.00	45.50 50.00
Mailing Envelopes (Size No. 10)	700	Standard business size (.065 each)	45.50	45.50
First-Class Postage	700	First-class commemorative stamps at \$.20 each	140.00	
Nonprofit Permit	700	At \$.059 each		41.30
TOTAL			\$428.00	\$329.30
Per-Student Contact Costs			\$.61	\$.47
Per-Student Response Costs (estimating 200 responses)			\$ 2.14	\$ 1.65

*As of 1983

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

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 local-item 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 and mailing 1,000 questionnaires
- Clerical time for recording, tracking, and editing returned questionnaires
- Report-writer's time
- Secretarial time for typing report

In many ways, survey administration is more an art than a science, and each institution should not be afraid to experiment with new techniques devised within the guidelines above and appropriate to its data-collection plan. At the same time, it is important that all of the issues treated in the previous two chapters be covered in some way and that alternatives to the above procedures be examined carefully before they are implemented. (Appendix D contains a summary checklist of all activities an institution must accomplish to effectively administer an SOIS survey.)

Using the SOIS Questionnaire-Analysis Service

A considerable 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. Many colleges and universities are prevented from conducting effective studies because they lack the qualified personnel or resources to support these activities. To meet this need, SOIS includes procedures that can provide 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, the SOIS analysis service can:

- Key punch 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 be inserted into locally produced interpretive reports
- Provide comparative reports summarizing the responses of students at other institutions using the SOIS Questionnaire-Analysis Service (Program Profiles)
- Provide a computer tape of coded resources for further institutional analysis

SOIS procedures for analyzing the questionnaires thus provide institutional administrators with a quick, inexpensive, and simple way of communicating student-outcomes information to the various campus and community audiences.

Preparing Questionnaires for Analysis

SOIS questionnaire-analysis procedures are initiated after the local survey coordinator 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 of receipt at the College Board.

To ensure that students have followed directions and that no inconsistencies have 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. 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 cannot be corrected but that can be discussed in the interpretive report.

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 are designed so that all responses are 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 their responses directly after each question. 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. (Remember that the number of responses to each local question is limited to ten and that they must be coded *numerically* [0-9]).

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 can decide how to code it.

In any questionnaire survey, mistakes by hand coders or by students who misread directions are bound to occur in recording responses. Editing the questionnaires before they are submitted for analysis can detect two basic kinds of errors:

1. Responses may be out of the acceptable range for an item. For example, one or two students may be shown to have sex codes of "3" when only "0" and "1" are valid responses. The structure of the questionnaire makes such coding and response errors in standard questions relatively rare, but they will occur more frequently on local items.

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. In many cases, these errors originate on the questionnaire itself (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.

How to Use the Batch Transmittal Form

After the completed questionnaires have been inspected and any necessary hand-coding performed, they should be securely bundled, together with a fully completed Batch Transmittal Form, and forwarded to

SOIS Director
College Board
888 Seventh Avenue
New York, New York 10019

In order to insure against loss of the questionnaires in transit, it is best to send them by registered mail or with a return receipt requested. A sample Batch Transmittal Form is shown in figure 4.1. 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 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 (1) has administered the Entering-Student Questionnaire to new students in the fall, winter, and spring quarters; (2) is transmitting all three administration's questionnaires to the College Board at one time; and (3) 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 separate analyses are desired, separate Batch Transmittal Forms must be completed.

FIGURE 4.1

QUESTIONNAIRE BATCH TRANSMITTAL FORM



NCHEMS-College Board
Student-Outcomes Information Services

Questionnaire Batch Transmittal Form

Institutional Study Identification Number (for College Board use only)

1 4
5 6

Type of Questionnaire Administered (Complete a separate form for each type of questionnaire)

CODES FOR THE

	2-Year Series	4-Year Series
Entering Student	21	41
Continuing Student	22	42
Program Completer/Graduating Student	23	43
Former Student	24	44
Recent Alumni	25	45
Long-Term Alumni	26	46

Date Questionnaires Were Administered

7 12
MO DAY YEAR

Type and Control of Institution

- 1 = Public two-year
- 2 = Public four-year
- 3 = Private two-year
- 4 = Private four-year
- 5 = Proprietary
- 6 = Other

13

Carnegie Designation of Institutional Type

- 1.1 = Research University I
- 1.2 = Research University II
- 1.3 = Doctorate Granting University I
- 1.4 = Doctorate Granting University II
- 2.1 = Comprehensive College or University I
- 2.2 = Comprehensive College or University II
- 3.1 = Liberal Arts College I
- 3.2 = Liberal Arts College II
- 4.0 = Two-year College or Institute
- 5.1 = Theological Seminary or Bible College
- 5.2 = Medical School or Center
- 5.3 = Other Separate Health Professions Center
- 5.4 = School of Engineering or Technology
- 5.5 = School of Business or Management
- 5.6 = School of Art, Music, or Design
- 5.7 = School of Law
- 5.8 = Teachers College
- 5.9 = Other Specialized Institution
- 6.0 = Institution for Non-Traditional Study
- 6.1 = No Carnegie Designation

14 15

Location of Institution (Postal Service State abbreviation)

Number of Questionnaires in this Batch

Keypunching Instructions: (Use A, B, or C, as appropriate)

- Keypunch questionnaire data and:
- A. Student name, address and I.D. number (Cost: 35¢ per questionnaire)
- B. Student I.D. number only (Cost: 25¢ per questionnaire)
- C. No student I.D. information (Cost: 17¢ per questionnaire)

Keypunch as per above with Key Verification (Cost: double the prices listed above)

(Y = Yes, N = No)

Should tape output be produced at \$50 per tape? (Y = Yes, N = No)

Track _____ Density _____

Extra copies of the report are available at \$20 per copy. Enter number of copies desired.

Should questionnaires be returned to institution? (Y = Yes, N = No)
(You will be billed for mailing costs plus handling charges of \$10)

Number of local questions added (Please attach a copy of your local questions):

SOIS Questionnaires submitted by:

Name _____ Title _____
Institution
Mailing Address _____
Telephone Number _____ Signature _____

Mail completed Transmittal Form with SOIS Questionnaires to:

SOIS Coordinator, College Board, 888 7th Avenue, New York, N.Y. 10019

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. In planning studies such as those described above, it is essential that prior arrangements be made with the Director of SOIS Data Processing to assure accuracy in the reporting of results.
- *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.)
- *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 be used to aid preparation of Program Profile comparative data reports.
- *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 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.
- *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 and handling 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.

Multiple copies of the computer-generated report, which typically can be produced less expensively at the time the report is generated, may be obtained through the Batch Transmittal Form. Computer tape output can also be provided in a variety of track/density formats. Such output can help an institution perform subsequent detailed analyses or different analyses as local needs and interests dictate.

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 identified 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 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 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.

In addition to group reports, NCHEMS and the College Board can arrange other analytic services to meet specific institutional, regional, or state needs. Most needs, however, should be determined before the questionnaires are administered to students. Those interested in special services or analyses should contact the SOIS Director at NCHEMS (P.O. Drawer P, Boulder, Colorado 80302) for special services related to survey design or data interpretation, or the SOIS Director at College Board (888 Seventh Avenue, New York, New York 10019) for special data analyses or comparative data.

The computer analyses of the SOIS Questionnaire-Analysis Service have been designed to provide the basic core of information needed for preparing local interpretive reports. Generally self-explanatory 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 the items in the original questionnaire, precedes each analysis. An index, arranged in alphabetical sequence by question content, follows the analysis and helps the user locate specific questions in the output provided. Samples of the first pages of a table of contents and index from the Entering-Student Questionnaire are illustrated in figures 4.2 and 4.3.

FIGURE 4.2
SAMPLE TABLE OF CONTENTS FOR SOIS ANALYSIS

QUESTION	DESCRIPTION	PAGE
1A	ACADEMIC GOALS	5
1	AGE	3
2C	CAREER IMPROVEMENT GOALS	6
2B	CAREER PREPARATION GOALS	6
17	COURSES -- PREFERRED TIME	17
14A	CURRENT DEGREE PLANS	11
12	EMPLOYMENT -- DURING FIRST TERM IN COLLEGE	14
13	ENROLLMENT STATUS	13
2	ETHNIC BACKGROUND	2
16	FINANCIAL AID APPLICANT	17
14	LEARNED ABOUT THIS COLLEGE FROM	14
10	MAJOR AREA OF STUDY	12
4	MARITAL STATUS	4
18A	MOST IMPORTANT GOAL	8
1	PERMANENT HANDICAP	4
2E	PERSONAL DEVELOPMENT AND ENRICHMENT GOALS	7
18	PLAN TO ENROLL AT THIS COLLEGE NEXT TERM	17
11	PREVIOUSLY ENROLLED IN ANY POSTSECONDARY EDUCATIONAL INSTITUTION	4
15	REASONS FOR ATTENDING THIS COLLEGE	15
18B	SECOND MOST IMPORTANT GOAL	9
1	SEX	1
10	SOCIAL/CULTURAL PARTICIPATION GOALS	7
18C	THIRD MOST IMPORTANT GOAL	10
14B	ULTIMATE DEGREE PLANS	12
16A	WAS THIS YOUR FIRST CHOICE COLLEGE	16
16B	WAS THIS YOUR FIRST CHOICE COLLEGE	16

FIGURE 4.3

SAMPLE INDEX FOR SOIS ANALYSIS

***** QUEST *****
 DATA ANALYSIS PROGRAM DEVELOPED BY THE
 COLLEGE BOARD
 COLLEGE BOARD / NCH E M S STUDENT OUTCOMES INFORMATION SERVICES (SOIS)
 SURVEY OF ENTERING STUDENTS

.....
 ...
 ... TABLE OF CONTENTS ...

QUESTION	DESCRIPTION	PAGE
1	SEX	1
2	ETHNIC BACKGROUND	2
3	AGE	3
4	MARITAL STATUS	4
5	PERMANENT HANDICAP	4
6	PREVIOUSLY ENROLLED IN ANY POSTSECONDARY EDUCATIONAL INSTITUTION	4
7A	ACADEMIC GOALS	5
7B	CAREER PREPARATION GOALS	6
7C	CAREER IMPROVEMENT GOALS	6
7D	SOCIAL & CULTURAL PARTICIPATION GOALS	7
7E	PERSONAL DEVELOPMENT AND ENRICHMENT GOALS	7
8A	MOST IMPORTANT GOAL	8
8B	SECOND MOST IMPORTANT GOAL	9
8C	THIRD MOST IMPORTANT GOAL	10
9A	CURRENT DEGREE PLANS	11
9B	ULTIMATE DEGREE PLANS	12
10	MAJOR (AREA OF STUDY)	12
11	ENROLLMENT STATUS	13
12	EMPLOYMENT — DURING FIRST TERM IN COLLEGE	14
13	REASONS FOR ATTENDING THIS COLLEGE	15
14	LEARNED ABOUT THIS COLLEGE FROM	15
15A	WAS THIS YOUR FIRST CHOICE COLLEGE	16
15B	WHAT WAS FIRST CHOICE COLLEGE	16
16	FINANCIAL AID APPLICANT	17
17	CLASSES — PREFERRED TIME	17
18	PLAN TO ENROLL AT THIS COLLEGE NEXT TERM	17

In the computer analysis, most items appearing on the questionnaires are cross-tabulated by responses to other items. This permits differential description of subgroups of the total student population. Typically, every item 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. Figures 4.4 through 4.9 give detailed presentations of the specific cross-tabs provided for each of the SOIS questionnaires. The cross-tabs provided in each report are documented in the computer output by a Question Table and a Cross-Tabulation Report, which appear at the end of the report. A full explanation of the items included in the Question Table and Cross-Tabulation Report is included in appendix E.

FIGURE 4.4

STUDENT-OUTCOMES INFORMATION SERVICES (SOIS)
Cross-Tabs for Entering-Student Questionnaire (4-Year)

ITEM	DESCRIPTION	CROSS-TABS																
		Sex	Full-time/Part-time	Ethnic Background	Transfer/Not-Transfer	Degree Goals	Plans for Next Term	Age	Marital Status	This College First Choice?	Other First-Choice College	Enroll Next Term?	Employment Status					
1.	Sex	X	X	X	X	X	X											
2.	Ethnic Background	X	X			X	X	X	X	X								
3.	Age	X	X	X	X	X	X	X	X	X								
4.	Marital Status	X	X	X	X	X	X											
5.	Handicap	X	X	X	X	X	X											
6.	Transfer-In	X	X	X	X	X	X	X	X									
7A	Academic Goals	X	X	X	X	X	X											
7B	Career-Preparation Goals	X	X	X	X	X	X											X
7C	Career-Improvement Goals	X	X	X	X	X	X											X
7D	Social and Cultural Goals	X	X	X	X	X	X											X
7E	Personal-Development Goals	X	X	X	X	X	X											
8.	Ranking of Goals	X	X	X	X	X	X	X	X	X	X	X						
9.	Degree Goals	X	X	X	X	X	X			X	X	X						
10.	Major	X	X	X	X	X	X			X	X	X						
11.	Full-time/Part-time	X	X	X	X	X	X											
12.	Employment Status	X	X	X	X	X	X	X	X									
13.	Reasons for Attending	X	X	X	X	X	X	X	X	X	X							
14.	Information Sources Used	X	X	X	X	X	X	X	X									
15.	First-Choice College	X	X	X	X	X	X	X	X									
16.	Aid Applicant?	X	X	X	X	X	X	X	X									X
17.	Preferred Class Time	X	X	X	X	X	X	X	X									X
	Local Questions	X	X	X	X	X	X											

FIGURE 4.5

STUDENT-OUTCOMES INFORMATION SERVICES (SOIS)
 Cross-Tabs for Continuing-Student Questionnaire (4-Year)

		CROSS-TABS													
ITEM	DESCRIPTION	Sex	Full-time/Part-time	Marital Status	Age	Ethnic Background	Degree Goals	Enrollment Next Term?	Employment Status	Academic Goals	Social/Cultural Goals	Career-Preparation Goals	Career-Improvement Goals	Aid Applicant?	Handicap
1.	Sex	X	X	X	X	X	X	X							
2.	Ethnic Background	X	X	X	X	X	X	X							
3.	Age	X	X			X	X	X							
4.	Marital Status	X	X	X	X	X	X	X							
5.	Handicap	X	X												
6.	Length of Enrollment	X	X	X	X		X	X							
7A	Academic Goals	X	X			X	X	X							
7B	Career-Preparation Goals	X	X			X	X	X	X						
7C	Career-Improvement Goals	X	X			X	X	X	X						
7D-E	Social and Personal-Development Goals	X	X			X	X	X							
8.	Ranking of Goals	X	X	X	X	X	X	X							
9.	Degree Goals	X	X	X	X	X	X	X							
10.	Major	X	X	X	X	X	X	X							
11.	Full-time/Part-time	X	X	X	X	X	X	X							
12.	Employment Status	X	X	X	X	X	X	X							
13.	Preferred Class Time	X	X	X	X	X	X	X	X						
14.	Enrollment Next Term?	X	X	X	X	X	X	X	X						
15.	Aid Applicant?	X	X	X	X	X	X	X	X	X					
16A-P	Evaluation of Our Services	X	X	X	X	X	X	X							
16Q	Evaluation of Our Services	X	X	X	X	X	X	X							X
16R	Evaluation of Our Services	X	X	X	X	X	X	X		X					
16S-W	Evaluation of Our Services	X	X	X	X	X	X	X							
	Local Questions	X	X	X	X	X	X	X							

FIGURE 4.6

STUDENT-OUTCOMES INFORMATION SERVICES (SOIS)
 Cross-Tabs for Former-Student Questionnaire (4-Year)

ITEM	DESCRIPTION	CROSS-TABS												
		Sex	Ethnic Background	Age	Marital Status	Full-time/Part-time	Degree/Nondegree	Length of Attendance	Degree Goal	This College First Choice?	Preferred College	G.P.A. Here	Employment Status	Aid Applicant?
1.	Sex	X	X	X	X	X	X							
2.	Ethnic Background	X	X	X	X	X	X							
3.	Age	X	X		X	X	X							
4.	Marital Status	X	X											
5.	Handicap	X	X	X	X	X	X							
6.	Length of Enrollment	X	X	X	X	X	X							
7.	Goals (Academic, Career, Social, Personal)	X	X			X	X							
8.	Ranking of Goals	X	X	X	X	X	X	X	X	X	X			
9.	Degree Goals	X	X	X	X	X	X	X	X					
10.	Major Here	X	X	X	X	X	X							
11.	First-Choice College	X	X	X	X	X	X	X	X					
12.	G.P.A. Here	X	X	X	X	X	X	X	X					
13.	Full-time/Part-time	X	X	X	X									
14.	Employment Status	X	X	X	X	X	X						X	
15.	Aid Applicant?	X	X	X	X	X	X		X					
16.	Reasons for Leaving	X	X	X	X	X	X	X	X	X	X	X	X	X
17.	Ranking of Reasons	X	X	X	X	X	X	X	X	X	X	X	X	X
18A-C	Evaluation of Services	X	X	X	X	X	X							
18D-G	Evaluation of Services	X	X	X	X	X	X				X			
18H-J	Evaluation of Services	X	X	X	X	X	X							
18K-L	Evaluation of Services	X	X	X	X	X	X					X	X	
18M	Evaluation of Services	X	X	X	X	X	X							
18N	Evaluation of Services	X	X	X	X	X	X					X	X	
18O-Q	Evaluation of Services	X	X	X	X	X	X							
18R	Evaluation of Services	X	X	X	X	X	X				X			
18S-W	Evaluation of Services	X	X	X	X	X	X							
19.	Future Plans	X	X	X	X	X	X	X	X	X	X			
	Local Questions	X	X	X	X	X	X							

FIGURE 4.7

STUDENT-OUTCOMES INFORMATION SERVICES (SOIS)

Cross-Tabs for Program-Completer/Graduating-Student Questionnaire (4-Year)

		CROSS-TABS									
		Age	Marital Status	Ethnic Background	Full-time/Part-time	Sex	Academic Goals	Career-Preparation Goals	Career-Improvement Goals	Social/Cultural Goals	Relationship of Job and Field of Study
ITEM	DESCRIPTION										
1.	Sex	X	X	X	X	X					
2.	Ethnic Background	X	X	X	X	X					
3.	Age	X	X	X	X	X					
4.	Marital Status	X	X	X	X	X					
5.	Handicap	X	X	X	X						
6.	Length of Enrollment	X	X	X	X	X					
7.	Goals	X	X	X	X						
8.	Ranking of Goals	X	X	X	X	X					
9.	Degree Completed	X	X	X	X	X					
10.	Major	X	X	X	X	X					X
11.	Full-time/Part-time	X	X	X	X	X					
12.	Transfer-In?	X	X	X	X	X					
13A-C	Evaluation of Our Services	X	X	X	X	X					
13D-G	Evaluation of Our Services	X	X	X	X	X	X	X			
13H	Evaluation of Our Services	X	X	X	X	X				X	X
13I-J	Evaluation of Our Services	X	X	X	X	X					
13K-L	Evaluation of Our Services	X	X	X	X	X	X	X	X	X	
13M-N	Evaluation of Our Services	X	X	X	X	X					
13O-W	Evaluation of Our Services	X	X	X	X	X					
14.	License/Exams Taken	X	X	X	X	X					
15.	Employment Plans	X	X	X	X	X					
16.	Rel. of Employment to Field of Study	X	X	X	X	X		X	X		
17.	Plans for Future Education	X	X	X	X	X					
18.	Ultimate Degree Goal	X	X	X	X	X					
	Local Questions	X	X	X	X	X					

FIGURE 4.8

STUDENT OUTCOMES INFORMATION SERVICES (SOIS)
Cross-Tabs for Recent-Alumni Questionnaire (4-Year)

ITEM	DESCRIPTION	CROSS-TABS											
		Sex	Ethnic Background	Marital Status	Age	Degree Received	Ultimate Degree Goal	Evaluation of Preparation	Current Employment	Length of Job Search	Evaluation of Preparation for First Job	Relationship of Preparation to Job	Looking for Employment
1.	Sex		X										
2.	Ethnic Background	X											
3.	Age	X	X	X									
4.	Marital Status	X	X		X								
5.	Handicap	X	X										
6.	Length of Enrollment	X	X	X	X	X							
7.	Goals	X	X			X							
8.	Ranking of Goals	X	X	X	X	X							
9.	Degree Received	X	X	X	X		X		X	X	X	X	
10.	Major	X	X	X	X	X	X	X	X	X	X	X	
11.	Ultimate Degree Goal	X	X	X	X	X	X						
12.	License/Exams Taken	X	X			X							
13.	Subsequent Enrollment	X	X	X	X	X	X	X	X				
14.	Subsequent College Attended	X	X			X	X	X					
15.	Subsequent Degree Received	X	X			X	X						
16.	Subsequent Major	X	X	X	X		X	X					
17.	Evaluation of Our Preparation	X	X			X	X						
18.	Transfer of Credits	X	X			X							
19.	Are You Currently Employed?	X	X	X	X	X							
20.	Description of Current Job	X	X	X	X	X							
21.	Length of Job Search	X	X	X	X	X							
22.	Source of First Job	X	X	X	X	X							
23.	Salary of First Job	X	X	X	X	X			X				
24.	Evaluation of Preparation for First Job	X	X				X			X			
25.	Relationship of Preparation to Job	X	X			X					X		
26.	Looking for Employment	X	X			X	X						X
27.	Would You Move for the Right Job?	X	X	X	X								
	Local Questions												

FIGURE 4.9

STUDENT-OUTCOMES INFORMATION SERVICES (SOIS)

Cross-Tabs for Long-Term Alumni Questionnaire (2-Year and 4-Year)

ITEM	DESCRIPTION	CROSS-TABS																		
		Sex	Ethnic Background	Marital Status	Age	Degree Received	Ultimate Degree Plans	Evaluation of Preparation for More Education	Employment Status	Evaluation of Preparation for First Job	Status of Current Degree Work									
1.	Sex		X	X	X															
2.	Ethnic Background	X		X	X															
3.	Age	X	X																	
4.	Marital Status	X	X																	
5.	Handicap																			
6.	Length of Enrollment	X	X							X		X								
7.	Year Our Program Completed									X		X								
8.	Most Recent Degree/Cert. Our College	X	X																	
9.	Major at Our College									X										
10.	Subsequent Enrollment	X	X	X	X	X				X										
11.	Subsequent College Attended	X	X			X				X										
12.	Subsequent Degree Sought	X	X																	X
13.	Subsequent Degree Completed	X	X																	
14.	Subsequent Major									X										
15.	Evaluation of Preparation for Add. Ed.	X	X	X	X	X	X	X	X	X	X	X	X							
16.	Evaluation of Counseling & Advisement	X	X	X	X	X				X										
17.	Ultimate Degree Plans	X	X			X														
18.	Evaluation of Prep. for Current Job	X	X																	
19.	Outcomes Realized	X	X	X	X															
20.	Rank-order of Outcomes	X	X	X	X	X	X	X	X	X	X	X	X							
21.	Employment Status	X	X			X	X													
22A	Description of First Job	X	X																	
22B	Description of Current Job	X	X																	
23A	Salary of First Job	X	X			X	X													
23B	Salary of Current Job	X	X			X	X	X	X											
	Local Questions	X	X							X		X								

Understanding the Computer Analysis

The bulk of the report provided by the SOIS Questionnaire-Analysis Service for each questionnaire consists of cross-tabulations of relevant questions against one another. These cross-tabulations enable the questionnaire administrator to directly compare the responses of different subgroups of students and to test hypotheses about some of the causal dynamics underlying particular responses. It is important to stress that a great deal of useful information is often contained in a single cross-tabulation and that each should be examined with some care. This section will explain the contents of the computer output itself, while the next chapter will treat a number of ways in which the cross-tabs provided can be converted into useful institutional information.

Cross-tabulations are presented in the computer-generated report in the order in which they appear on the questionnaire. All breakdowns of the responses to a particular question by different subgroups are thus presented in the same part of the report for easy reference. The table of contents and index provide immediate access to all breakdowns of a particular question.

A sample page of actual output from the Entering-Student Questionnaire is illustrated in figure 4.10. Note that the QUEST analysis automatically interjects appropriate text to explicate the material included in the tables. The example is drawn from the Two-Year College, Entering-Student Questionnaire, and it presents the responses to Question 7A—the “academic goals” of students entering the institution—broken down by sex, marital status, handicapped status, race, full-time/part-time enrollment, and age.²

Explanations of different parts of the computer output are presented below:

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, the prose description is too long to 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) 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 questions that allow multiple responses, the number will reflect the number of individual responses to the *question*, a number that will probably exceed the number of individual respondents. In

2. Note that part of the age breakdown is cut off and will continue on the next page.

FIGURE 4.10

SAMPLE ITEMS IN THE SOIS ENTERING-STUDENT QUESTIONNAIRE

THE FOLLOWING 5 QUESTIONS DESCRIBE THE REASONS STUDENTS AT YOUR INSTITUTION ELECTED TO PURSUE POSTSECONDARY EDUCATION. WITHIN EACH GROUPING OF GOALS (I.E. ACADEMIC, ETC.) THE RESPONDENT MAY HAVE IDENTIFIED MULTIPLE REASONS. BEGINNING WITH QUESTION 8, THE MOST IMPORTANT GOALS ARE ANALYZED SEPARATELY.

7A ACADEMIC GOALS	③				⑥				NOT HANDICAPPED			
	TOT	PCI	MALES	FEMALES	NOT MARRIED	MARRIED	NOT HANDICAPPED	HANDICAPPED	TOT	PCI	MALES	FEMALES
01 TO INCREASE KNOWLEDGE AND UNDERSTANDING	45	37.2	24 (51.1)	18 (39.8)	34 (59.6)	11 (17.2)	24.4 (35.9)	15 (23.4)	33.3 (43.1)	26 (33.3)	57.8 (76.5)	17.9 (23.4)
02 TO OBTAIN A CERTIFICATE OR DEGREE	28	23.1	5 (10.6)	6 (11.5)	5 (8.8)	23 (35.9)	18 (23.4)	10 (13.1)	64.3 (83.1)	5 (6.4)	17.9 (23.4)	14.7 (19.2)
03 TO COMPLETE COURSES NECESSARY TO TRANSFER	16	13.2	1 (2.1)	15 (28.8)	1 (1.8)	15 (23.4)	15 (23.4)	15 (19.2)	93.8 (121.2)	1 (1.3)	6.3 (8.2)	2.9 (3.7)
04 TO COMPLETE HIGH SCHOOL REQUIREMENTS	17	14.0	17 (36.2)		2 (3.5)	15 (23.4)	15 (19.2)	15 (19.2)	88.2 (114.8)	2 (2.6)	11.8 (15.4)	5.9 (7.7)
05 OTHER ACADEMIC GOALS	15	12.4		15 (28.8)	15 (26.3)			15 (19.2)	100.0 (129.0)			
TOTAL	121	99.9	47 (38.8)	52 (43.0)	57 (47.1)	64 (52.9)	78 (64.5)	34 (28.1)				

7A ACADEMIC GOALS	④ ETHNIC BACKGROUND							FULL TIME		PART TIME	
	WHITE	BLACK	HISPANIC	OTHER							
01 TO INCREASE KNOWLEDGE AND UNDERSTANDING	8 (32.0)	7 (21.9)	3 (16.7)	27 (58.7)	19 (43.1)	42.2 (55.3)					
02 TO OBTAIN A CERTIFICATE OR DEGREE	2 (8.0)	22 (68.8)		4 (8.7)	1 (2.5)	7.1 (9.1)					
03 TO COMPLETE COURSES NECESSARY TO TRANSFER		1 (3.1)	15 (83.3)		1 (2.5)	6.3 (8.2)					
04 TO COMPLETE HIGH SCHOOL REQUIREMENTS	15 (60.0)	2 (6.3)		15 (50.0)	15 (50.0)	88.2 (114.8)					
05 OTHER ACADEMIC GOALS				15 (32.6)	15 (29.4)	100.0 (129.0)					
TOTAL	25 (20.7)	32 (26.4)	18 (14.9)	46 (38.0)	51 (42.1)	42.2 (33.3)					

7A ACADEMIC GOALS	⑤ AGE					
	UNDER 23	23 TO 30	31 TO 50	51 TO 60	OVER 60	
01 TO INCREASE KNOWLEDGE AND UNDERSTANDING	27 (81.8)	3 (7.7)	12 (28.6)			60.0 (76.5)
02 TO OBTAIN A CERTIFICATE OR DEGREE	6 (18.2)	18 (46.2)		2 (100.0)	1 (100.0)	21.4 (54.5)

NOTE: See text for descriptions corresponding to numbered items.

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either case, the percentage reported will be the percentage the number of responses represents of the total reported at the end of the column.

The TOT and PCT columns appear only once for each item, before any subgroup breakdowns are presented. In subsequent analyses of that item using different cross-tabulations, the TOT and PCT columns are blank.

4. *Cross-Tabulation Rows* report the number and percentage of respondents answering both questions (broken down by the answers that they gave). 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. In many cases, adjacent cross-tabulation columns are not mutually exclusive because they are responses to different questions (as between other ethnic background and the full-time class load). In those cases, the calculation of raw percentage begins again with the first column of the new grouping.
5. *Cross-Tabulation Column Percentages* are given in parentheses immediately below the row percentages (XX.X). These show the percentage that the number of respondents 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.

It is important to emphasize that the row and column percentages presented in the analysis report give quite distinct but equally useful pieces of information. For example, the 15 married students who responded that an academic goal was to complete high-school requirements represent a high proportion (88.2 percent) of those who had this goal (see 6 in figure 4.10). Yet these 15 responses represented only 23.4 percent of the academic goals of married students in general. The first statistic (row percentage) will alert the manager of a high-school equivalency program, for example, to the probability that most of his students will be married. The second statistic (column percentage) will report to others the fact that this goal is only one of several approximately equal academic goals of married students. Indeed, in comparison with the column percentages for unmarried students, the goals of married students are quite distinct (a clear majority of 59.6 percent of unmarried students respond that their academic goal is "to increase knowledge and understanding"). Thus row and column percentages are equally important to the analyst but for quite different purposes.

The chapter that follows will more fully discuss the interpretation of questionnaire results, and appendix F contains samples of some of the kinds of interpretive reports that institutions can prepare from the computer-generated reports. Institutions should feel free to adapt and use these sample reports in preparing documents 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 upon request.

Turning Survey Data into Institutional Information

Using the data collected is certainly the most important and perhaps the most challenging element in conducting a survey. Unfortunately, it is common for institutions to collect survey data but never to publish a report or otherwise attempt to use or to disseminate the survey results. Not only is this consequence a waste of time and money but it also can contribute to an understandable reluctance on the part of students and administrators toward the whole activity of conducting surveys. The survey coordinator must therefore disseminate the survey results in appropriate formats to *all* levels of potential users (from students to college presidents) both to ensure that the information produced is usable and to encourage positive attitudes about the value of student-outcomes information throughout the institution.

In this regard, it is critical for those conducting surveys and attempting to use the results to understand the distinction between *data* and *information*. *Data* (for example, the responses to a questionnaire) are the direct results of observation or measurement. They consist of the raw facts from which information can be constructed. *Information*, on the other hand, consists of data that have been selected, combined, and put into a form that conveys to a given recipient user some useful knowledge upon which to base action. While the quality of data is determined by the validity, accuracy, and reliability of the measurement process used in data collection, the quality of information is determined as much by its relevance, timeliness, and acceptability to potential users as it is by its derivation from high-quality data (Jones 1982).

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The purpose of the final two chapters of the *Handbook* is to allow survey administrators using SOIS to assess the quality of the data obtained through the survey process, to suggest appropriate ways these data can be put into a form suited to the needs of different kinds of institutional users, and to give examples of the kinds of institutional problems and processes that can be most effectively informed by the types of information produced by SOIS.

Assessing the Quality of SOIS Data

Generally speaking, the quality of survey data is based upon two factors: the quality of the instruments used and the absence of response bias among those actually completing the questionnaires. The six questionnaires comprising SOIS have been carefully constructed and extensively field tested to minimize inaccuracies and biases due to a respondent misreading or misunderstanding questions or instructions. Nevertheless, one important aspect of the questionnaire editing process is to assess the degree to which students have responded appropriately. As mentioned in chapter 4, invalid responses can often be corrected before data analysis takes place. Where such responses cannot be corrected, the problem should be noted and the inferences drawn from the data modified accordingly. For example, on the Recent-Alumni Questionnaire, students have been known to report their current job and employment status rather than, as the survey asks, their *first* job. If a substantial number of students respond in this manner, results of the question may still be used, but they should be treated with caution.

A far more important potential problem for SOIS users is 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 responses by personal contact or interview 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 enrolled
- 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 percentages 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.

Among those doing survey analysis, the question is often asked what constitutes a good percentage of response to a questionnaire survey. As the above discussion should indicate, there is no simple answer to this question. A 50 percent response to a given questionnaire may be less representative than a 35 percent response, depending upon the characteristics of those responding and those choosing not to respond. Generally speaking, a high response rate is better than a low one in minimizing the problems associated with response bias, and response rates of less than 25 percent should be treated with extreme caution. At the same time, whatever the response rate obtained, there is no substitute for a careful assessment of response bias.

It is also important to note that response bias may exist even if a 100 percent response is obtained. This is particularly likely when administration of the questionnaire has been to a captive group—for example, all members of a given set of classes or all registrants completing registration on a given day or in a given place. In cases such as these, it is particularly important to compare the characteristics of respondents with those of the student body as a whole and to make appropriate interpretive adjustments when analyzing and presenting the data.

Creating a Student-Outcomes Data Base

An important part of constructing information from data often involves combining data from different sources to help answer a particular identified question. Considerable institutional experience has shown that reports that simply document the results of a single data-collection effort are rarely used by decisionmakers. An important challenge to the SOIS user is therefore to appropriately combine the

results of different questionnaires administered at different points in time both with one another and with data derived from other institutional records on students.

As emphasized in the first chapter of the *Handbook*, the primary goal of any student-outcomes data-gathering effort should be to begin to develop an institutional *data base* on student outcomes rather than to simply write a report. This data base can then be used on an ongoing basis to provide different kinds of management information. Such a data base may be as simple as a set of reports from the SOIS Questionnaire-Analysis Service kept together and documented for ready reference to inform particular questions from administrators as they arise. Or it could consist of the output tapes of responses to different questionnaires, which may be further analyzed by statistical packages such as SAS or SPSS to answer particular questions (see appendix E). Finally, it could consist of responses on SOIS questionnaires combined with other individual-student data drawn from enrollment and master-file data. Figure 5.1 summarizes important student data typically kept in student master files and enrollment files that can effectively be used in conjunction with the results of SOIS surveys.

Indeed, an institution may eventually wish to combine its computerized master file of student information with questionnaire information by means of a specially written computer program. 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 files corrected. The resulting matched information can be stored on tape or disk as one record for each respondent.

Regardless of its sophistication, the purpose of the data base is to serve as an ongoing, continuously updated information resource to answer institutional questions about student outcomes. Perhaps the greatest advantage of an ongoing student-outcomes data base is that it readily allows comparisons to be drawn among different student populations and among the responses of the same population at different points in time. Indeed, much of the art of converting questionnaire data into usable institutional information lies in the process of building effective *comparative* reports and data-presentation formats. Figure 5.2, for example, succinctly summarizes many of the main points of four successive administrations of the Entering-Student Questionnaire for a broad university constituency. Figure 5.3 presents the common comparative elements from different surveys administered to the same group of students as they progress through the institution; this chart provides results of the Entering-Student, Program-Completer, and two administrations of the Continuing-Student Questionnaire in comparable form. Finally, figure 5.4 presents a similar format for comparing different classes at the same point in time.

FIGURE 5.1

STUDENT MASTER-FILE DATA ELEMENTS USEFUL IN CONJUNCTION WITH SOIS

Academic Background/Aptitude	Personal Background	Enrollment Data	Academic Record
Predicted GPA	Citizenship	Student Type/Status	Credits Attempted (by term)
High School Attended	Veteran Status	Original Entry Date	Credits Earned (by term)
High-School Class Rank	Marital Status	Original Entry Status	Term/Cumulative GPA
High-School GPA	Financial-Aid Status	Day/Evening Enrollment	CEEL Credits Granted
High-School Graduation Year		Residence Hall/Status	Probation/Suspension Status
Advanced-Placement Credits		Major/Minor	
Transfer College		Advisor	
Transfer GPA			
Test Results (SAT, ACT, etc.)			
Placement-Exam Results			

FIGURE 5.2

ENTERING-STUDENT QUESTIONNAIRE SUMMARY
1978-1981

	1978	1979	1980	1981
% Female	51%	54%	53%	58%
% Black	9	8	11	13
% Age 21+	12	12	14	15
% Not seeking BS	9	8	11	13
% Seeking Business Degree	18	20	23	21
% Who say following reasons influenced enrollment decisions:				
Guidance counselor advice was very important	6	8	7	7
TSU recruitment was very important	5	3	5	4
Relatives were very important	5	4	6	6
Teachers' advice was very important	4	3	3	4
TSU academic reputation was not important	9	10	10	9
% TSU first choice	74	76	72	70
% Who plan to work	53	56	62	61
% Not needing occupational information	2	6	9	8
% Not needing guidance contacts	3	7	5	5
% Career planning finds good job fit	81	83	80	92
% Wanting placement office job searches	47	49	54	53
% Not using private car	37	34	42	44
% Not from single-parent family	95	89	83	81

FIGURE 5.3

1977 ENTERING-STUDENT COHORT SUMMARY

	1977	1978	1979	1980
% of Original Cohort Enrolled	100%	73%	69%	62%
% Graduated	0	3	12	19
% Citing Academic Goals	39	37	41	28
% Achieving Academic Goals	—	26	29	32
% Citing Career-Preparation Goals	54	52	46	66
% Achieving Career-Preparation Goals	—	37	39	46
% Citing Job-Improvement Goals	36	32	31	34
% Achieving Job-Improvement Goals	—	31	28	29
% Citing Social/Cultural Goals	36	28	22	21
% Achieving Social/Cultural Goals	—	26	29	32
% Citing Personal-Development Goals	39	41	46	39
% Achieving Personal-Development Goals	—	29	27	24
% Employed	14	22	28	39
% Planning to Seek Postgraduate Degree	48	42	31	23

FIGURE 5.4

COMPARISON OF 1980 ENTERING FRESHMEN AND GRADUATING SENIORS

	Entering Freshmen	Graduating Seniors
% Female	57%	59%
% Black	18	9
% Over 21 (Freshmen) or Over 25 (Seniors)	26	18
% Employed	19	37
% Seeking Postgraduate Degree	54	26
% Citing Academic Goals	39	34
% Citing Career-Preparation Goals	36	49
% Citing Job-Improvement Goals	32	43
% Citing Social/Cultural Goals	26	12
% Citing Personal-Development Goals	31	39
% Majoring (Graduating) in Business	21	19
% Majoring (Graduating) in Education	16	16
% Majoring (Graduating) in Health Professions	12	16
% Majoring (Graduating) in Social Services	9	11
% Majoring (Graduating) in Liberal Arts	42	38

Such summary charts accompanied by a brief memo that verbally describes salient trends are often an excellent way to initially distribute SOIS results to the institutional community. The list of items included in these examples is, of course, far from definitive, and should be modified to suit the assessed needs and interests of college and university administrators. If student master-file data are available to supplement SOIS results, a number of additional items can be usefully added to such a presentation. For example, figure 5.2 might be usefully expanded to include such summary characteristics of entering students as average SAT/ACT scores, average high-school GPA, and percentage receiving financial aid.

A second useful kind of comparison is of SOIS results among different institutions. The SOIS Questionnaire-Analysis Service report, "Program Profiles," for example, provides summary results of student respondents on each questionnaire from various types of institutions that have participated in SOIS.³ These kinds of comparative analyses are, of course, limited by the number of institutions that have previously participated in SOIS. At present, breakouts are limited to general groupings of institutional type such as public/private and two-year/four-year/proprietary classifications. As participation expands, so too can the kinds of comparative analyses provided.

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. An institution using the Program-Completer/Graduating-Student Questionnaire, for example, 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.

In sum, the concept of assembling data on students from different sources into a single ongoing data base and of using data drawn from this data base flexibly and comparatively to meet the needs of institutional decisionmakers *as they arise* cannot be overstressed. Data assembled and used in this way will have a considerably greater institutional impact than a single comprehensive report issued after each data-gathering effort.

Identifying the Users and Uses of Information

If the interpretation of survey data is to be meaningful, it is important to identify the key users of the information derived from the data and the levels of information use. When an institutional advisory committee is established in the survey-

3. This information is provided on a summary basis only. The confidentiality of each institution is fully protected.

planning stages, this activity may already 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 survey reports. 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 administrator 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. Another approach is to prepare a similar chart based upon a list of the most important perceived problems facing the institution—for example, attrition/retention and job or educational placement.

In both cases, it is probably most useful to summarize these exercises in terms of an explicit set of research *questions* for each user or use that the information provided by the survey may be able to answer. For example, explicit questions associated with a dean of student services as a user might include: "What are the characteristics of those who are satisfied and dissatisfied with particular services?" Those associated with an academic dean as a user, on the other hand, might include: "What are the differences between departments in the academic and personal goals of their students?" or "Which departments have been most effective in placing their students in jobs related to their training or in programs of further study?"

Similarly, research questions associated with an identified institutional *problem*, for example attrition/retention, might include: "What are the characteristics of students who drop out as opposed to those who persist?" or "What *particular* negative assessments of the institution and its services are given by those who leave?" or "Are the academic and personal aspirations of those who leave different from those who stay?"

Not only will different users want to answer different questions from the survey results, they will need different kinds of reports. The president or board members, 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 a report on 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 will thus most appropriately write a series of reports or memos based upon the data collected. 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, as outlined above, is to determine the major responsibilities of all potential users and then to gear the infor-

mation to fit particular responsibilities of each 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 or failure of the institution. Academic deans, 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.

Providing a truly useful report takes time and experience. The person preparing the report should solicit from the users their feedback on the information that was particularly useful to them. 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 F, Sample Reports from Student-Outcomes Assessment Surveys, provides four examples that can be used as models for survey reports or memos. The first two reports are examples of executive summaries; the third is an example of a report prepared to deal with a specific problem. The final report is an example of a complete research report summarizing the results of a former-student study.

Using SOIS Results in Decisionmaking

It is important that decisionmakers not only *receive* information displayed in a meaningful manner, but that they also are able to *use* the information to effect positive changes within the institution. Encouraging institutional decisionmakers to actually utilize student-outcomes survey results is one of the most challenging but potentially rewarding tasks facing the survey administrator.

Not every survey, of course, will cause widespread change, nor should it. Student questionnaire responses on a particular issue may be only the first piece of information available on a potential problem, and decisionmakers will want to assemble information from other sources to see if change is warranted. Indeed, a number of institutions use SOIS surveys in precisely this manner—to help pinpoint potential student problems that can then be made the subject of more intensive investigations. In this way, SOIS surveys, regularly administered, can help set an effective institutional-research agenda. Finally, student responses will in many cases document a high level of satisfaction with the status quo; in such cases, the information provided is of utility to decisionmakers, but no changes are warranted.

Institutional experience has demonstrated that student-outcomes information is most likely to be used when it can be directly incorporated into regular ongoing institutional decision processes or when it can be brought to bear directly upon a widely recognized institutional issue or problem. Furthermore, institutional experience with SOIS and other student-outcomes data-gathering mechanisms has produced a number of strategies and approaches for promoting outcomes-information use throughout the institution. While each institution will appropriately develop its own techniques for applying SOIS information, this chapter is intended as a brief overview of the kinds of applications and techniques available.

Applying SOIS to Institutional Processes and Problems

One way of increasing the likelihood that student-outcomes information will be used by institutional decisionmakers is to ensure that the information is in a form suitable for incorporation into some of the regular activities that administrators engage in. For most decisionmakers, student-outcomes information falls into the category of "nice to know" rather than "need to know." The information provided by SOIS and other data-gathering techniques will be much more likely to be recognized as relevant if it is not seen as distinct from the kinds of productivity information upon which most decisionmakers claim to base decisions. Indeed, it should be recognized that information about student outcomes represents an important component of any assessment of institutional or departmental/unit productivity.

This recognition has in fact increased in the past five years, primarily due to contracting institutional resources. Boards of trustees, state coordinating and governing boards, and accrediting bodies have begun to give particular attention to and to hold institutions accountable for quality of output as well as efficiency. And perhaps more importantly, as enrollment maintenance becomes more difficult, questions of student satisfaction and the reasons for it become paramount. Both tendencies argue for an increasing role of student-outcomes information in the institutional decision process.

Student-outcomes information of the kind provided by SOIS has proven of value in a wide range of regular ongoing institutional activities and decision processes. Included in these activities and processes are the following:

- *In the preparation of accreditation self-studies.* Regional accreditation bodies are increasingly interested in assessing the degree to which institutional activities meet student needs. Graduate surveys to evaluate student success in job placement and in preparation for further study have long been strongly encouraged as a part of institutional self-study activities. Increasingly, studies of currently enrolled students to assess satisfactions and dissatisfactions with particular aspects of the college experience are also being encouraged. The kinds of information provided by SOIS are well suited to these requirements, particularly if information has been collected on an ongoing basis. Indeed, one large northeastern public university recently made a description of the structure and findings of its ongoing information-gathering processes the centerpiece of its accreditation report. A prominent place was given to the collection and analysis of student-outcomes information.
- *In program-review/unit-evaluation activities.* Among public institutions, academic program review has been growing in importance as governing boards seek ways to allocate scarce resources to the most

effective programs. A similar trend has also been apparent among private institutions. While academic program reviews in the past were concerned primarily with an assessment of faculty quality and the range and depth of the curriculum, increasingly they are including an outcomes component. Usually this is in the form of a survey of the program's graduates to assess preparation for employment and for graduate education in the field. SOIS has substantial advantages in providing information to aid this process. By using different sets of departmentally designed local questions on SOIS instruments, the institution can obtain data on standard items to enable interdepartmental comparisons to be made, while allowing each department to investigate those issues that concern it most. Similarly, reviews of non-academic or service-unit activities are increasingly requiring a user survey. SOIS questions on levels of use and satisfaction with services address these needs directly among different populations of students. Again it is important to stress that such evaluations are more valid and valuable if collected regularly rather than on a one-shot or unit-by-unit basis.

- *In institutional planning and budget-review activities.* The uses of student-outcomes information in institutional planning are many. One small private liberal-arts college is using various kinds of outcomes information to review its mission in the light of actual student characteristics and achievements. A regional public institution is using graduate survey results together with regional economic projections to prepare a schedule for planning and implementing new occupational programs. Finally, a large urban community college is currently developing a computer-based, comprehensive, outcomes-oriented planning system to provide a context for annual budget reviews.
- *In developing student-retention strategies.* Student-outcomes surveys will often reveal patterns of difficulties and dissatisfactions among different kinds of currently enrolled students—patterns that may often lead to a decision to leave the institution. Comparisons of the responses of graduates and former students may also reveal considerable differences in academic and personal goals, as well as different perceptions of and satisfaction with the institution. Both kinds of information are of considerable value in planning and implementing institutional retention strategies. A number of institutions, for example, are using SOIS results in conjunction with other student data on dropouts to try to isolate a set of early warning signals in a student's decision to leave the institution; high-risk students can thus be identified at an early stage for particular attention. Similarly, many institutions are using SOIS to determine levels of use of particular student-service areas by dropouts and persisters; if dropouts are not aware of, are not using,

or are not satisfied with a particular service, attempts are made to improve its visibility and the dimensions of service provided.

In using student-outcomes data to develop student-retention programs, it is important to stress that this should be an institutionwide activity. Often the feeling is present on campus that retention is a student-services problem. In contrast, most student-outcomes research has shown such factors as program quality and faculty contact to be among the most important factors involved in retention (see especially Terenzini 1979). Research has also shown that the most effective retention strategies are institutionwide and have been developed with the full participation of all institutional constituencies—faculty, staff, students, and administration. The importance of a committee with broad representation from all constituencies to review the retention implications of student-outcomes information cannot be overstressed. One public regional university has formally established such a committee in its governance structure with the responsibility to make retention recommendations to the president on a regular basis. Reviewing and discussing SOIS results is one of this committee's primary tasks.

- *In developing recruitment materials and strategies.* Outcomes surveys not only can discover the difficulties and potential difficulties of students but can also document their successes and achievements. Both are of importance in developing effective recruitment strategies. Knowing the characteristics of the persisting, successful student can help determine what kinds of students should be given priority in recruitment. Furthermore, effective presentation of the success of recent graduates in finding employment or in furthering their professional development can increase interest in the institution among high-quality students. On the other hand, identifying the special problems of particular student populations—university students, older students or part-time students, for example—may allow the institution to develop special recruitment materials for these students. Such materials may be designed to help prospective students from these groups more effectively prepare themselves for college work. Or they may assure prospective students that appropriate support services to meet their needs are available. A large southeastern public university, for example, has recently developed a minority-recruitment strategy based upon reviewing the success of its minority graduates and upon stressing the kinds of high-school preparation required to perform effectively at the university.

These are only some examples of institutional problems or processes to which student outcomes information such as that produced by SOIS can be effectively applied.

Some Themes of Information Utilization

A number of recent research or demonstration efforts have recently been undertaken on the use of student-outcomes information in institutional decisionmaking. Among these is a three-year NCHEMS demonstration project funded by the W. K. Kellogg Foundation, with sites at seven public universities and community colleges nationwide. Developing evidence from this and other projects on student-outcomes information utilization indicates that information of the type provided by SOIS is most likely to be used by administrators:

- When the information needs of institutional decisionmakers are carefully assessed by those collecting the data, and the relevance of student-outcomes information to their particular area of responsibility is stressed continually by those providing it
- When the information collected is disseminated in a series of tailored memos to particular decisionmakers or is included in the response to a particular decisionmaker's request for information
- When the information collected is presented comparatively so that contrasts between different types of students and trends over time are highlighted—often through graphic presentation
- When the information collected is effectively integrated with other kinds of student data—often more familiar to the decisionmaker—to yield a comprehensive picture of a particular problem
- When a clearly identifiable institutional problem is present, for example a high attrition rate, and where there is high-level administrative commitment to solve the problem
- When an appropriate forum for meaningfully discussing the institutional implications of student-outcomes data is present—for example, a retention or student-success committee with broad representation and high-level administrative endorsement
- Finally, when an attitude can be developed throughout the institution that the improvement of student outcomes is important, can be accomplished, and will be rewarded

It should be recognized that development of these conditions—particularly the last one—at a given institution is bound to be a slow process. In the last analysis, using student-outcomes information requires an attitude change on the part of most administrators toward the recognition that this kind of information can help them solve *their* problem. It is up to the survey administrator to foster this change through prompt, short, problem-specific responses to particular concerns and to encourage information users to communicate what they need and to critically evaluate what they have been given. Communicating what others have done with similar information both within the institution and at other institutions is an important part of this process.

The same, of course, is also true of students themselves. 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 questionnaires, 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 interest 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 involved in the institution. Students currently enrolled may also maintain a more positive attitude toward the school. Thus when change 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.

In sum, ensuring that survey information, once collected, is in an appropriate form and is introduced into an institutional forum where it can be effectively utilized is by no means as simple an activity as administering the survey itself. But it is equally a part of the survey administrator's responsibility. In undertaking this activity, patience may be a primary virtue, and a number of exchanges may need to occur before institutional decisionmakers begin to recognize what is available and how it can be used. Utilization efforts, however, can rapidly acquire a momentum of their own as this process takes place.

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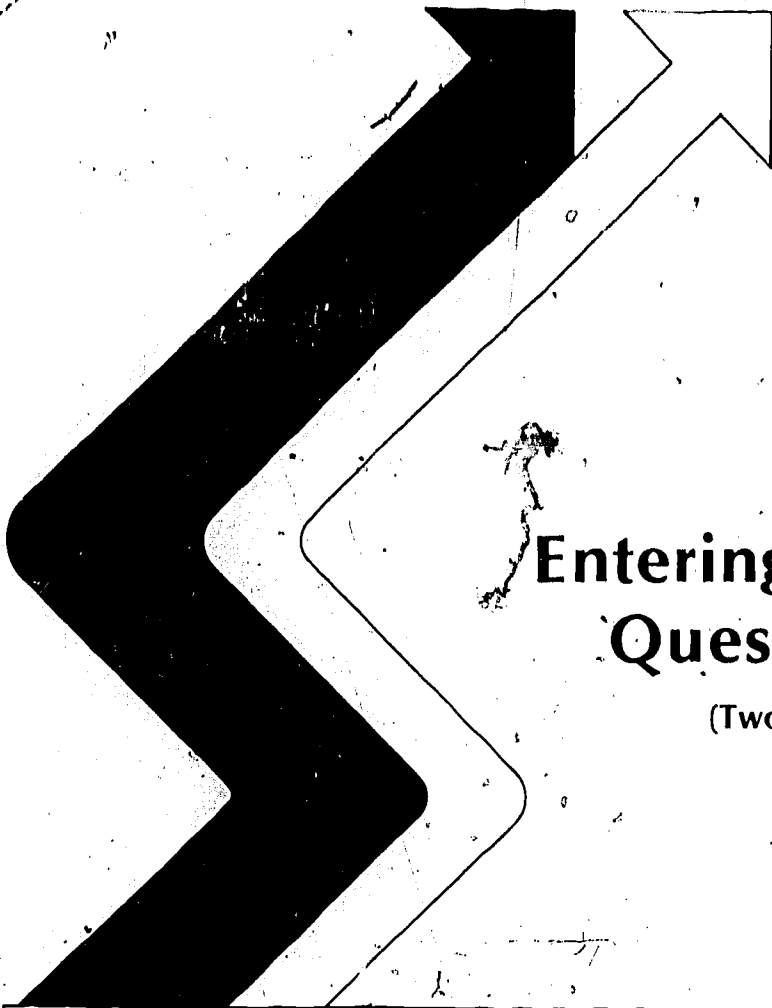
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APPENDIX A

**The Two-Year Colleges
Questionnaires**



Entering-Student Questionnaire

(Two-Year Institutions)

PERSONAL IDENTIFICATION SECTION

Do not complete this section unless you are asked to do so. *Please print.*

LAST NAME	<input type="text"/>	FIRST NAME	<input type="text"/>	MIDDLE INITIAL	<input type="text"/>
	1-12		13-20		21

ANY OTHER NAME WHICH MAY APPEAR ON YOUR SCHOOL OR COLLEGE RECORDS _____

STUDENT IDENTIFICATION NUMBER	<input type="text"/>	TELEPHONE NUMBER	<input type="text"/>
	22-30		

PERMANENT MAILING ADDRESS STREET AND NUMBER

CITY STATE ZIP CODE

51-70 71-72 73-77

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 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?

- 0 Yes
 1 No

If you are not currently married, you would circle the number 1.

1. What is your sex?

- 0 Female
 1 Male

2. How do you describe yourself? *Circle one.*

- 0 American Indian or Alaskan Native
 1 Asian, Pacific Islander, or Filipino
 2 Black or Afro American
 3 Hispanic, Chicano, or Spanish-speaking American
 4 White or Caucasian
 5 Other _____

3. How old are you?

- 0 Under 18
 1 18 to 22 years
 2 23 to 25 years
 3 26 to 30 years
 4 31 to 40 years
 5 41 to 50 years
 6 51 to 60 years
 7 61 years or more

4. Are you currently married?

- 0 Yes
 1 No

5. Do you feel that you have a permanent handicap?

Circle all that apply.

- 0 No
 1 Yes, restricted mobility
 2 Yes, restricted hearing
 3 Yes, restricted vision
 4 Yes, but I prefer not to record it on this form
 5 Other _____

6. a. Have you previously enrolled in any postsecondary educational institution? *If you have enrolled in more than one, please circle the most recent.*

- 0 No, I have not been previously enrolled
 1 Yes, at this institution
 2 Yes, at a public two-year college
 3 Yes, at a public four-year college or university
 4 Yes, at a private college or university
 5 Yes, at a vocational/technical school, hospital school of nursing, trade school, or business school
 6 Other _____

b. If you have attended another college, please write in the name of the one you most recently attended.

7. The following statements reflect the goals of many college students. *Please circle the letters of all those goals that are important to you.*

Academic Goals

- 89 A To increase my knowledge and understanding in an academic field
 90 B To obtain a certificate or degree
 91 C To complete courses necessary to transfer to another educational institution
 92 D Other _____

Career-Preparation Goals

- 93 E To discover my career interests
 94 F To formulate long-term career plans and/or goals
 95 G To prepare for a new career
 96 H Other _____

Job or Career-Improvement Goals

- 97 I To improve my knowledge, technical skills, and/or competencies required for my job or career
 98 J To increase my chances for a raise and/or promotion
 99 K Other _____

Social and Cultural Participation Goals

- 100 L To become actively involved in student life and campus activities
 101 M To increase my participation in cultural and social events
 102 N To meet people
 103 O Other _____

Personal Development and Enrichment Goals

- 104 P To increase my self-confidence
 105 Q To improve my leadership skills
 106 R To improve my ability to get along with others
 107 S To learn skills that will enrich my daily life or make me a more complete person
 108 T To develop my ability to be independent, self-reliant, and adaptable
 109 U Other _____

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 110 Second Most Important 111 Third Most Important 112

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

Current	Ultimate	
<input type="checkbox"/> 0	<input type="checkbox"/> 0	Not seeking a certificate or degree
<input type="checkbox"/> 1	<input type="checkbox"/> 1	Certificate of one year or less
<input type="checkbox"/> 2	<input type="checkbox"/> 2	Certificate of more than one year
<input type="checkbox"/> 3	<input type="checkbox"/> 3	Associate degree
<input type="checkbox"/> 4	<input type="checkbox"/> 4	Bachelor's degree
<input type="checkbox"/> 5	<input type="checkbox"/> 5	Graduate or professional degree

10. Circle the code in your intended major or area of study below.

Now look at List A: Majors and Areas of Study and enter in the boxes below the code number of the category in which your major or area of study falls.

115-118

11. What is your intended enrollment status?

0 Primarily for credit - full-time (12 or more hours each term enrolled)

1 Primarily for credit - part-time (less than 12 hours each term enrolled)

2 Primarily not for credit

12. What will your primary employment or occupation 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 employed outside of the home

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 influence your choice to attend our college.

131 A. Academic reputation of our college

132 B. Course offerings

133 C. Former student's advice

134 D. Teacher's or friend's advice

135 E. Counselor's advice

136 F. Employer's suggestion

137 G. Will help me retain my current employment

138 H. Costs

139 I. Availability of financial aid

140 J. Institution's social reputation

141 K. Close to home

142 L. Wanted a change in scenery or location

143 M. Range and availability of student services

144 N. Can identify with fellow students

145 O. Inconvenient to go elsewhere

146 P. Other _____

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

147 0 From people at my high school

148 1 From relatives, friends, or acquaintances

149 2 From a representative of this college

150 3 From a college placement service or some other education-information service

151 4 From a college catalog

152 5 From material I received in the mail

153 6 From material I read in a newspaper or magazine

154 7 From a radio or TV advertisement

155 8 From an information display at an education fair, shopping center, county fair, or similar location

156 9 Other _____

15. a. Was our college your first choice?

157 0 Yes

1 No

b. If no, what kind of college was your first choice?

158 0 A public two-year college

1 A public four-year college or university

159 2 A private college or university

160 3 A vocational technical school, hospital school of nursing, trade school, or business school

4 Other _____

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

16. Do you plan to apply for financial aid at our college?

161 0 Yes, I have already applied

1 Yes, I plan to apply

2 No, I do not think I will ever apply

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

Circle one.

- 0 Weekday mornings
- 1 Weekday afternoons
- 2 Weekday evenings
- 3 Anytime during the week
- 4 Anytime during the weekend
- 5 No preference

18. Do you plan to enroll at our college next term?

- 0 Yes
- 1 No, I will complete my program this term
- 2 No, but I plan to return at some future date
- 3 No, I plan to transfer to another college
- 4 No, I have no plans for additional education at this time
- 5 I do not yet know my plans for next term

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.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
157	158	159	160	161	162	163	164	165	166					

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

9141640000045400
5M 279 1P Rob 2BA 11

4

90

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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	Communications
0700	Computer and Information Sciences
0800	Education
0900	Engineering
1000	Fine and Applied Arts (includes Art, Dance, Drama, Music, etc.)
1100	Foreign Languages
1200	Health Professions
1300	Home Economics (includes Clothing and Textiles, Institutional Housekeeping, and Food Service Management, etc.)
1400	Law
1500	Letters (includes Creative Writing, Literature, Philosophy, Speech, etc.)
1600	Library Science
1700	Mathematics
1800	Military Sciences
1900	Physical Sciences (includes Chemistry, Physics, Earth Sciences, etc.)
2000	Psychology
2100	Public Affairs and Social Services
2200	Social Sciences (includes Anthropology, Economics, History, Political Science, Sociology, etc.)
2300	Theology and Religion
4900	Interdisciplinary Studies
6000	Other
7000	Undecided but probably program of four or more years

Programs usually requiring less than four years of study


5000	Business and Commerce Technologies (includes Accounting, Banking, Commercial Art, Hotel and Restaurant Management, etc.)
5005	Secretarial Technologies (includes Office Supervising and Management, Stenographic and Typing Technology, etc.)
5006	Personal Service Technologies (includes Stewardess Training, Cosmetologist, etc.)
5100	Data Processing Technologies (includes Computer Programming, Key punching, etc.)
5200	Health Services and Paramedical Technologies (includes Dental and Medical Assistant Technology, LPN, 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 Technologies (includes Carpentry, Plumbing, Sheet Metal, Heating, etc.)
5400	Natural Science Technologies (includes Agriculture Technology, Environmental Health Technology, Forestry and Wildlife Technology, etc.)
5404	Food Services Technologies (includes Food Service Supervising, Institutional Food Preparation, etc.)
5500	Public Service Technologies (includes Law Enforcement Technology, Teacher Aid Training, Fire Control Technology, Public Administration Technology, etc.)
5506	Recreation and Social Work Related Technologies
8000	Other
9000	Undecided but probably less than four year program

NOTE: On the actual SOIS Questionnaires, LIST A is printed on a panel extending from page 2. Because it is identical in all questionnaires, it is reprinted in this appendix only once.

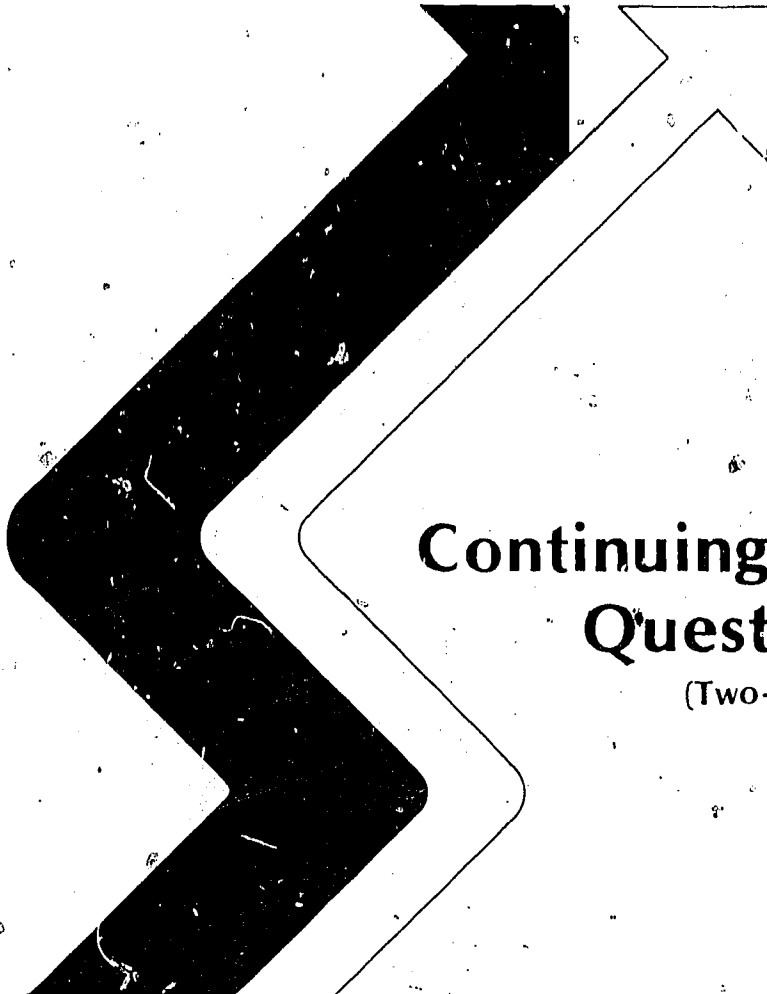
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LIST B: OCCUPATIONAL TITLES

- 01 Agricultural and Forestry Occupations, Fishers, 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 Technicians
- 08 Marketing and Sales Occupations
- 09 Material Handlers, Equipment Cleaners, and Laborers
- 10 Mechanics and Repairers
- 11 Military Occupations
- 12 Natural Scientists and Mathematicians
- 13 Nurses, Pharmacists, Dietitians, Therapists, and Physicians Assistants
- 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 Workers, Religious Workers, and Lawyers
- 17 Teachers, Librarians, and Counselors
- 18 Technologists and Technicians (except Health)
- 19 Transportation and Material-Moving Occupations
- 20 Writers, Artists, Editors, and Athletes
- 21 Other

More questions on page 4 

NOTE: LIST B, printed on the backside of the panel showing LIST A, is included only with the Recent-Alumni Questionnaire; in all other questionnaires this panel is blank.



Continuing-Student Questionnaire

(Two-Year Institutions)

PERSONAL IDENTIFICATION SECTION

Do not complete this section unless you are asked to do so. Please print.

LAST NAME	<input type="text"/>	FIRST NAME	<input type="text"/>	MIDDLE INITIAL	<input type="text"/>
	112		1120		21

ANY OTHER NAME WHICH MAY APPEAR ON YOUR SCHOOL OR COLLEGE RECORDS _____

STUDENT IDENTIFICATION NUMBER	<input type="text"/>	TELEPHONE NUMBER	_____
	22 40		

PERMANENT MAILING ADDRESS STREET AND NUMBER	<input type="text"/>
	41 55

CITY	<input type="text"/>	STATE	<input type="text"/>	ZIP CODE	<input type="text"/>
	56 75		1 72		11 57

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 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?

- 0 Yes
 1 No

If you are not currently married, you would circle the number 1.

1. What is your sex?

- 0 Female
 1 Male

2. How do you describe yourself? Circle one.

- 0 American Indian or Alaskan Native
 1 Asian, Pacific Islander or Filipino
 2 Black or Afro American
 3 Hispanic, Chicano, or Spanish speaking American
 4 White or Caucasian
 5 Other _____

3. How old are you?

- 0 Under 18
 1 18 to 22 years
 2 23 to 25 years
 3 26 to 30 years
 4 31 to 40 years
 5 41 to 50 years
 6 51 to 60 years
 7 61 years or more

4. Are you currently married?

- 0 Yes
 1 No

5. Do you feel that you have a permanent handicap? Circle all that apply.

- 82 0 No
 83 1 Yes, restricted mobility
 84 2 Yes, restricted hearing
 85 3 Yes, restricted vision
 86 4 Yes, but I prefer not to record it on this form
 87 5 Other _____

6. How long have you been at our college?

- 0 One term
 1 One year
 2 Two years
 3 Three years
 4 Four years
 5 More than four years

7. The following statements reflect the goals of many college students. In the first column, please circle the letters of those goals that are important to you at this time. In the second column, circle the letters of those goals that you feel you are achieving or have achieved.

These goals are important to me at this time

These goals I am achieving or have achieved

- | | | <u>Academic Goals</u> | |
|--|---|-----------------------|--|
| 89 | A | 90 | A To increase my knowledge and understanding in an academic field |
| 91 | B | 92 | B To obtain a certificate or degree |
| 93 | C | 94 | C To complete courses necessary to transfer to another educational institution |
| 95 | D | 96 | D Other _____ |
| <u>Career Preparation Goals</u> | | | |
| 97 | E | 98 | E To discover career interests |
| 99 | F | 100 | F To formulate long term career plans and/or goals |
| 101 | G | 102 | G To prepare for a new career |
| 103 | H | 104 | H Other _____ |
| <u>Job or Career-Improvement Goals</u> | | | |
| 105 | I | 106 | I To improve my knowledge, technical skills and/or competencies for my job or career |
| 107 | J | 108 | J To increase my chances for a raise and/or promotion |
| 109 | K | 110 | K Other _____ |
| <u>Social and Cultural Participation Goals</u> | | | |
| 111 | L | 112 | L To become actively involved in student life and campus activities |
| 114 | M | 114 | M To increase my participation in cultural and social events |
| 115 | N | 116 | N To meet people |
| 117 | O | 118 | O Other _____ |
| <u>Personal-Development and Enrichment Goals</u> | | | |
| 119 | P | 120 | P To increase my self-confidence |
| 121 | Q | 122 | Q To improve my leadership skills |
| 123 | R | 124 | R To improve my ability to get along with others |
| 125 | S | 126 | S To learn skills that will enrich my daily life, or make me a more complete person |
| 127 | T | 128 | T To develop my ability to be independent, self-reliant, and adaptable |
| 129 | U | 130 | U Other _____ |

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 important goal is "To obtain a certificate or degree," enter the letter B in the first box.

Most Important 111 Second Most Important 112 Third Most Important 113

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

Current	Ultimate	
0	0	Not seeking a certificate or degree
1	1	Certificate of one year or less
2	2	Certificate of more than one year
3	3	Associate degree
4	4	Bachelor's degree
5	5	Graduate or professional degree

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

b. Now look at List A: Majors and Areas of Study and enter in the boxes below the code number of the category in which your major or area of study falls.

100-139

11. What is your intended enrollment status?

- 0 Primarily for credit — full-time (12 or more hours each term enrolled)
- 1 Primarily for credit — part-time (less than 12 hours each term enrolled)
- 2 Primarily not for credit

12. What is your primary employment or occupation status at this time? Circle the most appropriate response.

- 0 Employed more than half time
- 1 Employed half time or less
- 2 Homemaker, not employed outside of the home
- 3 Not employed but would like to work
- 4 Not employed and do not care to work while attending college

13. When would you prefer to take your classes?

- 0 Weekday mornings
- 1 Weekday afternoons
- 2 Weekday evenings
- 3 Anytime during the week
- 4 Anytime during the weekend
- 5 No preference

14. Do you plan to enroll at our college next term?

- 0 Yes
- 1 No, I will complete my program this term
- 2 No, but I plan to return at some future date
- 3 No, I plan to transfer to another college
- 4 No, I have no plans for additional education at this time
- 5 I do not yet know my plans for next term

15. Concerning financial aid, which of the following is true for you?

- 0 I have received financial aid
- 1 I have applied for financial aid but was denied
- 2 I have not applied for financial aid but plan to apply in the future
- 3 I do not think I will ever apply

16. The following are services provided by colleges. How would you evaluate these services as provided by our college? For each service, circle the number of the response that is most appropriate.

	0	1	2	3	
					I did not know about this service
					I knew about this service but did not use it
					I used this service and was satisfied with it
					I used this service but was not satisfied with it
145	0	1	2	3	Admissions
146	0	1	2	3	Registration
147	0	1	2	3	Business office
148	0	1	2	3	Academic advising
149	0	1	2	3	Guidance, counseling, and testing
150	0	1	2	3	Reading, writing, math, and study skills improvement
151	0	1	2	3	Tutoring
152	0	1	2	3	Minority affairs
153	0	1	2	3	College cultural programs
154	0	1	2	3	Recreation and athletic programs
155	0	4	2	3	Financial aid
156	0	1	2	3	Student employment
157	0	1	2	3	Career planning
158	0	1	2	3	Job placement
159	0	1	2	3	Housing services
160	0	1	2	3	Cafeteria
161	0	1	2	3	Health services
162	0	1	2	3	Library
163	0	1	2	3	Child care
164	0	1	2	3	Bookstore
165	0	1	2	3	Parking
166	0	1	2	3	Campus security
167	0	1	2	3	Other _____

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.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
160	161	170	171	172	173	174	175	176	177	178	179	180	181	182

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

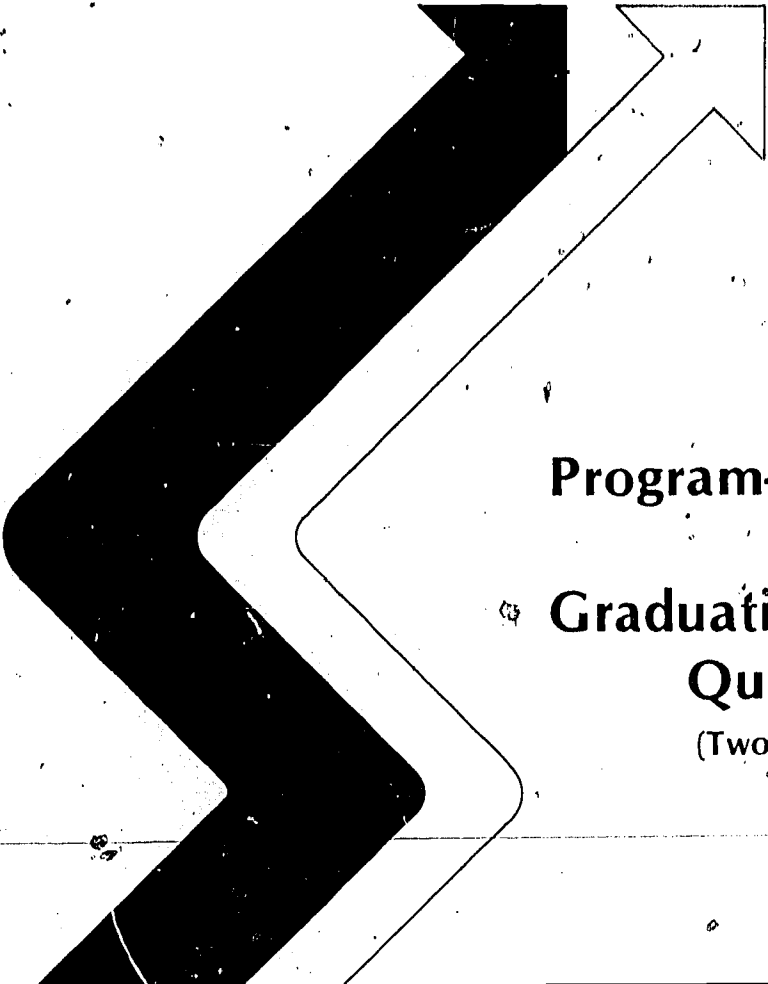
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103

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Program-Completer and Graduating-Student Questionnaire (Two-Year Institutions)

PERSONAL IDENTIFICATION SECTION
Do not complete this section unless you are asked to do so. *Please print.*

LAST NAME	<input type="text"/>	FIRST NAME	<input type="text"/>	MIDDLE INITIAL	<input type="text"/>
	1-12		1-20		1-1

ANY OTHER NAME WHICH MAY APPEAR ON YOUR SCHOOL OR COLLEGE RECORDS _____

STUDENT IDENTIFICATION NUMBER	<input type="text"/>	TELEPHONE NUMBER	_____
	22-40		

PERMANENT MAILING ADDRESS (STREET AND NUMBER)

CITY STATE ZIP CODE

76-70 71-72 73-77

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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 below.

Sample

4. Are you currently married?

0 Yes

1 No

If you are not currently married, you would circle the number 1.

1. What is your sex?

0 Female

1 Male

2. How do you describe yourself? Circle one.

0 Asian, Pacific Islander, or Filipino

1 Black or Afro-American

2 Hispanic, Chicano, or Spanish speaking American

3 White or Caucasian

4 Other

3. How old are you?

0 Under 18

1 18 to 22 years

2 23 to 25 years

3 26 to 30 years

4 31 to 40 years

5 41 to 50 years

6 51 to 60 years

7 61 years or more

4. Are you currently married?

0 Yes

1 No

5. Do you feel that you have a permanent handicap?

Circle all that apply.

0 No

1 Yes, restricted mobility

2 Yes, restricted hearing

3 Yes, restricted vision

4 Yes, but I prefer not to record it on this form

5 Other

6. How long have you been at our college?

0 One term

1 One year

2 Two years

3 Three years

4 Four years

5 More than four years

7. The following statements reflect the goals of many college students. In the first column, please circle the letters of those goals that are important to you at this time. In the second column, circle the letters of those goals you feel you are achieving or have achieved.

These goals are important to me at this time

These goals I am achieving or have achieved

		Academic Goals	
88	A	90	A To increase my knowledge and understanding in an academic field
91	B	92	B To obtain a certificate or degree
91	C	91	C To complete courses necessary to transfer to another educational institution
95	D	96	D Other
Career Preparation Goals			
97	E	98	E To discover career interests
99	F	100	F To formulate long term career plans and/or goals
101	G	102	G To prepare for a new career
103	H	101	H Other
Job or Career Improvement Goals			
105	I	106	I To improve my knowledge, technical skills, and/or competencies for my job or career
107	J	108	J To increase my chances for a raise and/or promotion
109	K	110	K Other
Social and Cultural Participation Goals			
111	L	112	L To become actively involved in student life and campus activities
113	M	114	M To increase my participation in cultural and social events
115	N	116	N To meet people
117	O	118	O Other
Personal Development and Enrichment Goals			
119	P	120	P To increase my self-confidence
121	Q	122	Q To improve my leadership skills
123	R	124	R To improve my ability to get along with others
125	S	126	S To learn skills that will enrich my daily life or make me a more complete person
127	T	128	T To develop my ability to be independent, self-reliant, and adaptable
129	U	130	U Other

8. From the list 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, 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 Third Most Important

9. Which of the following are you receiving from our college?

- 134 0 Certificate of one year or less
 1 Certificate of more than one year
 2 Associate degree
 3 Other

10. a. Please write in your major or area of study while at our college.

b. Now look at List A: Majors and Areas of Study and enter in the boxes below the code number of the category in which your major or area of study falls.

135-138

11. What has been your primary enrollment status while attending our college?

- 139 0 Primarily for credit - full-time (12 or more hours each term enrolled)
 1 Primarily for credit - part-time (less than 12 hours each term enrolled)
 2 Primarily not for credit.

12. For the program you are now completing, were any of the credits earned from another college? Circle all that apply.

- 140 0 No, they were all earned here
 1 Yes, from a public two-year college
 2 Yes, from a public four-year college or university
 3 Yes, from a private college or university
 4 Yes, from a vocational technical school, hospital school of nursing, trade school, or business school
 5 Other

13. The following are services provided by colleges. How would you evaluate these services as provided by our college? For each service circle the number of the response that is most appropriate.

	I did not know about this service				I know about this service but did not use it				I used this service and was satisfied with it				I used this service but was not satisfied with it				
	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	
141	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Admissions
142	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Registration
143	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Business office
144	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Academic advising
145	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Guidance, counseling, and testing
146	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Reading, writing, math, and study skills improvement
147	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Tutoring
148	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Minority affairs
149	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	College cultural programs
150	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Recreation and athletic programs
151	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Financial aid
152	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Student employment
153	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Career planning
154	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Job placement
155	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Housing services
156	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Cafeteria
157	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Health services
158	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Library
159	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Child care
160	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Bookstore
161	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Parking
162	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Campus security
163	0	1	2	3	0	1	2	3	0	1	2	3	0	1	2	3	Other

14. Have you taken any licensing or certification examination related to your major or area of study at our college?

- 164 0 Yes, I have taken and passed an exam
 1 Yes, I have taken an exam but do not yet know the results
 2 Yes, I have taken an exam but did not pass
 3 No, I have not taken any exams but plan to do so
 4 No, and I do not plan to take any

15. What are your current employment plans?

- 165 0 I plan to continue working in the same job I had prior to completing this educational program
 1 I plan to work in a job I recently obtained
 2 I am currently looking for a job
 3 I do not plan to work outside the home
 4 I have not yet formulated my employment plans
 5 Other

16. If you currently have or will be starting a new job, to what extent is it related to your major or area of study at our college?

- 166 0 Directly related
 1 Somewhat related
 2 Not related

17. a. Do you currently have plans for additional education?
- 0. No, not at this time
 - 1. Yes, I plan to re-enroll at this college
 - 2. Yes, I have already enrolled at another college
 - 3. Yes, I plan to enroll at another college
 - 4. I am currently undecided about any additional education
- b. If you circled response 2 or 3, please write in the name of the college you plan to attend.

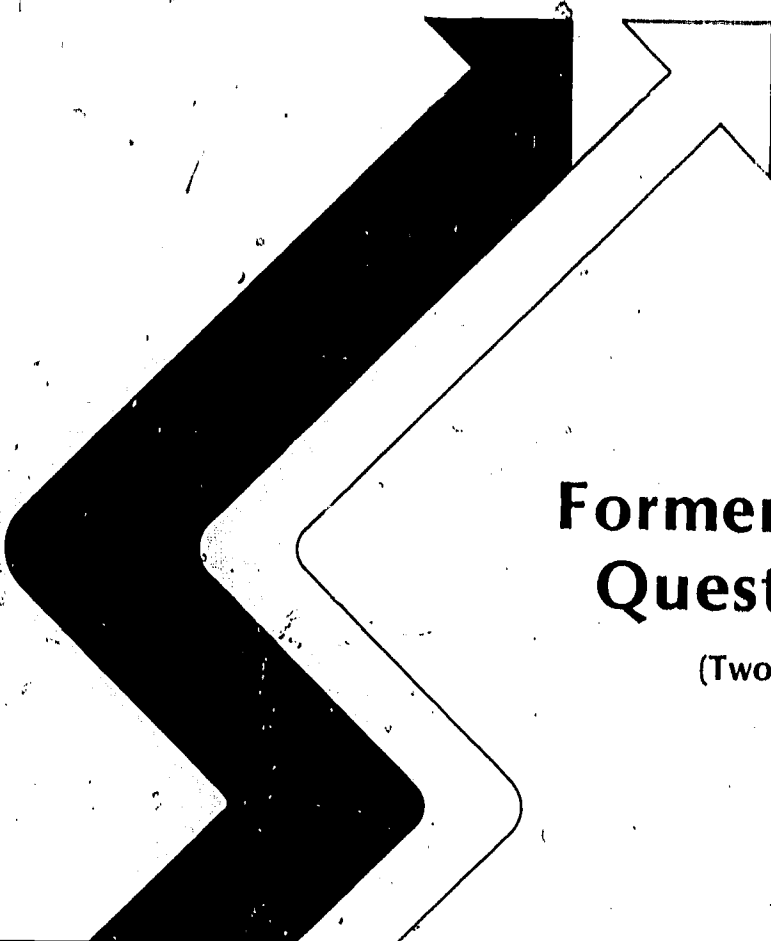
18. If you plan to continue your education, what is the highest degree you ultimately plan to earn?
- 0. Certificate
 - 1. Associate degree
 - 2. Bachelor's degree
 - 3. Master's degree
 - 4. Specialist degree (e.g., Ed.S.)
 - 5. Professional degree (e.g., medicine, law, theology)
 - 6. Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)

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.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
160	170	171	172	173	174	175	176	177	178	179	180	181	182	183

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



Former-Student Questionnaire

(Two-Year Institutions)

PERSONAL IDENTIFICATION SECTION

Do not complete this section unless you are asked to do so. *Please print.*

LAST NAME

FIRST NAME

MIDDLE INITIAL

ANY OTHER NAME WHICH MAY APPEAR ON YOUR SCHOOL OR COLLEGE RECORDS _____

STUDENT IDENTIFICATION NUMBER

TELEPHONE NUMBER _____

PERMANENT MAILING ADDRESS STREET AND NUMBER

CITY

STATE

ZIP CODE

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 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?
 0 Yes
 1 No

If you are not currently married, you would circle the number 1.

1. What is your sex?

- 0 Female
 1 Male

2. How do you describe yourself? Circle one.

- 0 American Indian or Alaskan Native
 1 Asian, Pacific Islander, or Filipino
 2 Black or Afro-American
 3 Hispanic, Chicano, or Spanish-speaking American
 4 White or Caucasian
 5 Other _____

3. How old are you?

- 0 Under 18
 1 18 to 22 years
 2 23 to 25 years
 3 26 to 30 years
 4 31 to 40 years
 5 41 to 50 years
 6 51 to 60 years
 7 61 years or more

4. Are you currently married?

- 0 Yes
 1 No

5. Do you feel that you have a permanent handicap? Circle all that apply.

- 82 0 No
 83 1 Yes, restricted mobility
 84 2 Yes, restricted hearing
 85 3 Yes, restricted vision
 86 4 Yes, but I prefer not to record it on this form
 87 5 Other _____

6. How long did you attend our college?

- 0 One term
 1 One year
 2 Two years
 3 Three years
 4 Four years
 5 More than four 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 important to you when you attended our college. In the second column, circle the letters of those goals you feel you are achieving or have achieved as a result of your experiences at our college.

These goals were important to me		These goals I am achieving or have achieved	
			Academic Goals
89	A	90	A To increase my knowledge and understanding in an academic field
91	B	92	B To obtain a certificate or degree
93	C	94	C To complete courses necessary to transfer to another educational institution
95	D	96	D Other _____
			Career-Preparation Goals
97	E	98	E To discover career interests
99	F	100	F To formulate long-term career plans and/or goals
101	G	102	G To prepare for a new career
103	H	104	H Other _____
			Job- or Career-Improvement Goals
105	I	106	I To improve my knowledge, technical skills, and/or competencies in my job or career
107	J	108	J To increase my chances for a raise and/or promotion
109	K	110	K Other _____
			Social- and Cultural-Participation Goals
111	L	112	L To become actively involved in student life and campus activities
113	M	114	M To increase my participation in cultural and social events
115	N	116	N To meet people
117	O	118	O Other _____
			Personal-Development and Enrichment Goals
119	P	120	P To increase my self-confidence
121	Q	122	Q To improve my leadership skills
123	R	124	R To improve my ability to get along with others
125	S	126	S To learn skills that will enrich my daily life or make me a more complete person
127	T	128	T To develop my ability to be independent, self-reliant, and adaptable
129	U	130	U Other _____

8. From the list of goals in question 7, please 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 Important 131 Second Most Important 132 Third Most Important 133

9. What degree were you seeking when you attended our college?

- 144 { 0 Not seeking a certificate or degree
1 Certificate of one year or less
2 Certificate of more than one year
3 Associate degree
4 Other _____

10. a. Please write in your major or area of study at our college.

b. Now look at List A: Majors and Areas of Study and enter in the boxes below the code number of the category in which your major or area of study falls.

135-138

11. a. Was our college your first choice?

- 141 { 0 Yes
1 No

b. If no, what kind of college was your first choice?

- 140 { 0 A public two-year college
1 A public four-year college or university
2 A private college or university
3 A vocational/technical school, hospital school of nursing, trade school, or business school
4 Other _____

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

12. When you left our college, what was your overall grade point average (GPA)?

- 141 { 0 4.00 to 3.01
1 3.00 to 2.01
2 2.00 to 1.01
3 1.00 or less
4 Unknown or did not have one

13. What was your primary enrollment status when you attended our college?

- 142 { 0 Primarily for credit — full-time (12 or more hours each term enrolled)
1 Primarily for credit — part-time (less than 12 hours each term enrolled)
2 Primarily not for credit

14. While you were enrolled, how many hours did you normally work when classes were being held?

- 143 { 0 I was not employed
1 I employed 1-10 hours per week
2 Employed 11-20 hours per week
3 Employed 21-35 hours per week
4 Employed 36 hours or more per week

15. Did you apply for financial assistance (loan or scholarship) while at our college?

- 144 { 0 Yes, and I received it
1 Yes, but I did not receive it
2 Yes, but I left before I found out if I received it
3 No

16. The decision to leave a particular college can be motivated by a variety of reasons. Please circle the letters of all of the reasons that contributed to your decision to leave our college.

Academic Reasons

- 145 A Achieved my academic goals
146 B Transferred to another college
147 C Needed a break from college
148 D Courses/programs I wanted were not available
149 E Dissatisfied with my academic performance
150 F Dissatisfied with the quality of teaching
151 G Dissatisfied with the learning environment
152 H Course work not what I wanted
153 I Unsure of my academic goals
154 J Other _____

Financial Reasons

- 155 K Did not have enough money to continue
156 L Could not obtain sufficient financial aid
157 M Could not earn enough money while enrolled
158 N Other _____

Other Reasons

- 159 O Achieved my personal goals
160 P Accepted a job or entered the military
161 Q College experience not what I expected
162 R Few people I could identify with
163 S Moved out of the area
164 T Could not work and go to school at the same time
165 U Other responsibilities became too great
166 V Personal problems
167 W Other _____

17. From the list of reasons in question 16, please select the three most important reasons and enter their codes below. For example, if the most important reason was that you "Transferred to another college," enter the letter B in the first box.

Most Important Second Most Important Third Most Important
168 169 170

18. The following are services provided by colleges. How would you evaluate these services as provided by our college? For each service, circle the number of the response that is most appropriate.

I did not know about this service
 I knew about this service but did not use it
 I used this service and was satisfied with it
 I used this service but was not satisfied with it

171 0 1 2 3 Admissions
 172 0 1 2 3 Registration
 173 0 1 2 3 Business office
 174 0 1 2 3 Academic advising
 175 0 1 2 3 Guidance, counseling, and testing
 176 0 1 2 3 Reading, writing, math, and study-skills improvement
 177 0 1 2 3 Tutoring
 178 0 1 2 3 Minority affairs
 179 0 1 2 3 College cultural programs
 180 0 1 2 3 Recreation and athletic programs
 181 0 1 2 3 Financial aid
 182 0 1 2 3 Student employment
 183 0 1 2 3 Career planning
 184 0 1 2 3 Job placement
 185 0 1 2 3 Housing services
 186 0 1 2 3 Cafeteria
 187 0 1 2 3 Health services
 188 0 1 2 3 Library
 189 0 1 2 3 Child care
 190 0 1 2 3 Bookstore
 191 0 1 2 3 Parking
 192 0 1 2 3 Campus security
 193 0 1 2 3 Other

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.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	21	22	23	24
195	196	197	198	199
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	26	27	28	29
200	201	202	203	204
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	31	32	33	34
205	206	207	208	209

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

19. 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
 4 I am currently undecided about any additional education

If you circled responses 2 or 3, please write in the name of the college you plan to attend or are attending.

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 below.

Sample:

4. Are you currently married?

- 0 Yes
 1 No

If you are not currently married, you would circle the number 1.

1. What is your sex?

- 0 Female
 1 Male

2. How do you describe yourself? Circle one.

- 0 American Indian or Alaskan Native
 1 Asian, Pacific Islander, or Filipino
 2 Black or Afro-American
 3 Hispanic, Chicano, or Spanish-speaking American
 4 White or Caucasian
 5 Other _____

3. How old are you?

- 0 Under 18
 1 18 to 22 years
 2 23 to 25 years
 3 26 to 30 years
 4 31 to 40 years
 5 41 to 50 years
 6 51 to 60 years
 7 61 years or more

4. Are you currently married?

- 0 Yes
 1 No

5. Do you feel that you have a permanent handicap? Circle all that apply.

- 0 No
 1 Yes, restricted mobility
 2 Yes, restricted hearing
 3 Yes, restricted vision
 4 Yes, but I prefer not to record it on this form
 5 Other _____

6. How long did you attend our college?

- 0 One term
 1 One year
 2 Two years
 3 Three years
 4 Four years
 5 More than four 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 important to you when you attended our college. In the second column, circle the letters of those goals you feel you are achieving or have achieved as a result of your experiences at our college.

These goals were important to me when I attended this college

These goals I am achieving or have achieved

- | | | |
|-------|-------|---|
| 89 A | 90 A | <u>Academic Goals</u> |
| | | To increase my knowledge and understanding in an academic field |
| 91 B | 92 B | To obtain a certificate or degree |
| 93 C | 94 C | To complete courses necessary to transfer to another educational institution |
| 95 D | 96 D | Other _____ |
| | | <u>Career-Preparation Goals</u> |
| 97 E | 98 E | To discover career interests |
| 99 F | 100 F | To formulate long-term career plans and/or goals |
| 101 G | 102 G | To prepare for a new career |
| 103 H | 104 H | Other _____ |
| | | <u>Job- or Career-Improvement Goals</u> |
| 105 I | 106 I | To improve my knowledge, technical skills, and/or competencies for my job or career |
| 107 J | 108 J | To increase my chances for a raise and/or promotion |
| 109 K | 110 K | Other _____ |
| | | <u>Social- and Cultural-Participation Goals</u> |
| 111 L | 112 L | To become actively involved in student life and campus activities |
| 113 M | 114 M | To increase my participation in cultural and social events |
| 115 N | 116 N | To meet people |
| 117 O | 118 O | Other _____ |
| | | <u>Personal-Development and Enrichment Goals</u> |
| 119 P | 120 P | To increase my self-confidence |
| 121 Q | 122 Q | To improve my leadership skills |
| 123 R | 124 R | To improve my ability to get along with others |
| 125 S | 126 S | To learn skills that will enrich my daily life or make me a more complete person |
| 127 T | 128 T | To develop my ability to be independent, self-reliant, and adaptable |
| 129 U | 130 U | Other _____ |

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

Most Important 131 Second Most Important 132 Third Most Important 133

2

9. What was the most recent certificate or degree you received from our college?

- 144
- 0 Certificate of one year or less
 - 1 Certificate of more than one year
 - 2 Associate degree
 - 3 Other _____

10. a. Please write in the major or area of study associated with the certificate or degree referred to in question 9.

b. Now look at List A: Majors and Areas of Study and enter in the boxes below the code number of the category in which your major or area of study falls.

--	--	--	--	--

145-148

11. If you plan to continue your education, what is the highest degree you ultimately plan to earn?

- 149
- 0 Certificate
 - 1 Associate degree
 - 2 Bachelor's degree
 - 3 Master's degree
 - 4 Specialist degree (e.g., Ed.S.)
 - 5 Professional degree (e.g., medicine, law, theology)
 - 6 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)

12. Have you taken any licensing or certification examination related to your major or area of study at our college?

- 140
- 0 Yes, I have taken and passed an exam
 - 1 Yes, I have taken an exam but do not yet know the results
 - 2 Yes, I have taken an exam but did not pass
 - 3 No, I have not taken any exams, but plan to do so
 - 4 No, and I do not plan to take any

13. Since completing your program at our college, have you enrolled at another college?

- 141
- 0 Yes
 - 1 No → If No, skip to question 19.

14. a. After your program at our college, what kind of college, university, professional, or vocational school did you most recently attend?

- 142
- 0 A public two-year college
 - 1 A public four-year college
 - 2 A private college or university
 - 3 A vocational/technical school, hospital school of nursing, trade school, or business school.
 - 4 Other _____

b. Please write in the name of that institution.

15. What certificate or degree were you seeking at the college referred to in question 14?

- 141
- 0 Certificate
 - 1 Associate degree
 - 2 Bachelor's degree
 - 3 Master's degree
 - 4 Specialist degree (e.g., Ed.S.)
 - 5 Professional degree (e.g., medicine, law, theology)
 - 6 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)

16. a. Please write in your intended major or area of study at the college referred to in question 14.

b. Now look again at List A: Majors and Areas of Study and enter in the boxes below the code number of the category in which your intended major or area of study at the college referred to in question 14 falls.

--	--	--	--	--

144-147

17. How well did our college prepare you for your additional college work?

- 148
- 0 Excellent preparation
 - 1 Good preparation
 - 2 Adequate preparation
 - 3 Inadequate preparation
 - 4 Does not apply

18. Did you transfer any credits from our college toward your additional college work?

- 149
- 0 Yes
 - 1 No, I did not try to transfer any credits
 - 2 No, I tried but they were not accepted.

19. Are you currently employed?

- 150
- 0 Yes, I have a full-time job outside of the home
 - 1 Yes, I have a part-time job outside of the home
 - 2 No, I am not currently employed outside of the home

→ If No, skip to question 26

20. a. Describe your current job (e.g., accountant, engineer, salesperson, teacher).

b. Now look at List B: Occupational Titles and enter in the boxes below the code number of the category in which your current job falls.

--	--

151-152

21. After completing your program at our college, how long did you look for work before obtaining your first job?
- 0 Had a job which continued after I completed my program
 - 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
 - 5 More than eight months after graduation

22. How did you find your first job?
- 0 College placement office or professor
 - 1 Professional periodicals or organizations
 - 2 Civil Service application
 - 3 Employment agency
 - 4 Newspaper advertisement
 - 5 Direct application to employer
 - 6 Friends or relatives
 - 7 Other _____

23. What was your annual salary or wage in your first job?
- 0 Less than \$3,000 per year
 - 1 \$3,000 to \$5,999 per year
 - 2 \$6,000 to \$8,999 per year
 - 3 \$9,000 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 \$20,999 per year
 - 7 \$21,000 to \$23,999 per year
 - 8 \$24,000 or more per year

24. How well did our college prepare you for your first job?
- 0 Excellent preparation
 - 1 Good preparation
 - 2 Adequate preparation
 - 3 Inadequate preparation
 - 4 Not applicable to first job

25. To what extent is/was your first job related to your major or area of study at our college?
- 0 Directly related
 - 1 Somewhat related
 - 2 Not related

26. 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?
- 0 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 but could not find any

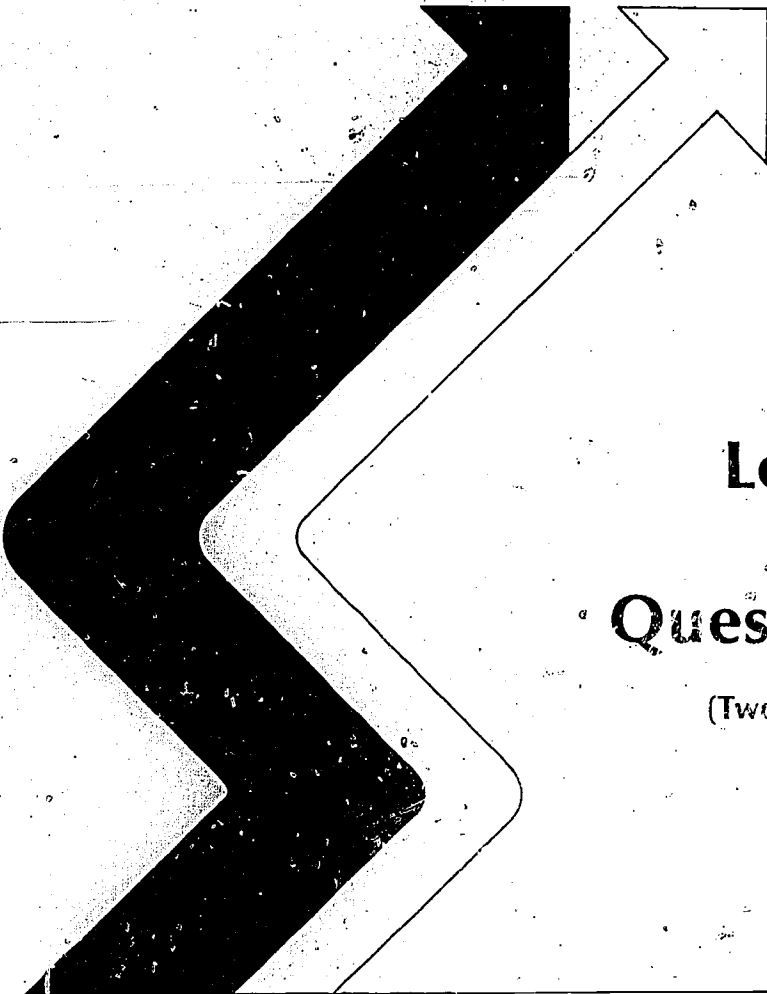
27. Whether you are currently employed or not, would you be willing to move to another community to work in a job related to your major or area of study at our college?
- 0 Yes
 - 1 No

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.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	
160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	

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



Long-Term Alumni Questionnaire

(Two-Year Institutions)

PERSONAL IDENTIFICATION SECTION
Do not complete this section unless you are asked to do so. Please print.

LAST NAME	<input type="text"/>	FIRST NAME	<input type="text"/>	MIDDLE INITIAL	<input type="text"/>
	1-12		13-20		21

ANY OTHER NAME WHICH MAY APPEAR ON YOUR SCHOOL OR COLLEGE RECORDS _____

STUDENT IDENTIFICATION NUMBER	<input type="text"/>	TELEPHONE NUMBER	_____
	22-30		

PERMANENT MAILING ADDRESS NUMBER AND STREET

CITY STATE ZIP CODE

IF THIS IS A NEW ADDRESS PLEASE CHECK HERE

31-55
56-70
71-72
73-77
78

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 directions are given, please circle the number or letter of the most appropriate response, such as in the sample question below.

Sample:

3. Are you currently married?

- 0 Yes
 1 No

If you are not currently married, you would circle the number 1.

1. What is your sex?

- 0 Female
 1 Male

2. How do you describe yourself? Circle one.

- 0 American Indian or Alaskan Native
 1 Asian, Pacific Islander, or Filipino
 2 Black or Afro-American
 3 Hispanic, Chicano, or Spanish-speaking American
 4 White or Caucasian
 5 Other

3. How old are you?

- 0 Under 18 years
 1 18 to 22 years
 2 23 to 25 years
 3 26 to 30 years
 4 31 to 40 years
 5 41 to 50 years
 6 51 to 60 years
 7 61 years or more

4. Are you currently married?

- 0 Yes
 1 No

5. Do you feel that you have a permanent handicap? Circle all that apply.

- 0 No
 1 Yes, restricted mobility
 2 Yes, restricted hearing
 3 Yes, restricted vision
 4 Yes, but I prefer not to record it on this form
 5 Other

6. How long did you attend our college?

- 0 One or two terms
 1 One year
 2 Two years
 3 Three years
 4 Four years
 5 Five years
 6 Six years
 7 More than six years

7. When did you complete your program at our college? Please enter the year in the box below.

90-91

8. What was the most recent certificate or degree you received from our college?

- 0 Certificate (specify): _____
 1 Associate of arts degree
 2 Associate of sciences degree
 3 Other degree (specify): _____

9. a. Please write in the major or area of study associated with the degree or certificate referred to in question 8. If you received a degree or certificate with a "double" major, please write in both.

b. Now look at List A: Majors and Areas of Study and enter in the boxes below the code number(s) of the category(ies) in which your major(s) or area(s) of study fall(s).

93-96
 97-100 (Use this second box only if you took a "double" major)

10. Since completing your program at our college, have you undertaken further formal study?

- 0 Yes
 1 No

→ If No, skip to question 12.

11. a. After your program at our college what kind of college, university, professional, or vocational school did you most recently attend?

- 0 A public two-year college
 1 A public four-year college, university or professional school
 2 A private college, university or professional school
 3 A vocational-technical school, hospital school of nursing, trade school, or business school
 4 Other (specify): _____

b. Please write in the name of that institution.

103-106 (Please do not write in this box)

12. What degree or certificate were you seeking at the college, university, professional, or vocational school referred to in question 11?

- 0 Certificate
 1 Associate degree
 2 Bachelor's degree
 3 Master's degree
 4 Specialist degree (e.g., Ed S)
 5 Professional degree (e.g., medicine, law, theology)
 6 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)
 7 No degree or certificate (e.g., job advancement, self-enrichment)

13. Did you complete the requirements of the certificate or degree indicated in question 12?

- 0 Yes
- 1 No, but I am still enrolled seeking it
- 2 No, but I still plan to complete it even though I am not currently enrolled
- 3 No, and I do not expect to complete it
- 4 Does not apply

14. a. Please write in the major or area of study associated with the degree or certificate referred to in question 12. If you were pursuing a degree or certificate with a "double" major, please write in both.

b. Now look again at List A: Majors and Areas of Study and enter in the boxes below the code number(s) of the category(ies) in which your major(s) or area(s) of study fall(s).

111:

111b:

(Use this second box only if you pursued a "double" major)

15. How well did our college prepare you for your additional formal education?

- 0 Excellent preparation
- 1 Good preparation
- 2 Adequate preparation
- 3 Inadequate preparation
- 4 Does not apply

16. How would you evaluate the counseling and advisement we gave you about your options for further formal education after you completed your program at our college?

- 0 Excellent
- 1 Good
- 2 Adequate
- 3 Inadequate
- 4 Does not apply

17. What is the highest degree or certificate you ultimately plan to earn? (If this is the same as the degree you now hold, circle that degree.)

- 0 Certificate
- 1 Associate degree
- 2 Bachelor's degree
- 3 Master's degree
- 4 Specialist degree (e.g., Ed.S.)
- 5 Professional degree (e.g., medicine, law, theology)
- 6 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)
- 7 Does not apply

18. How well did our college prepare you for the work you are now doing (or if you are not currently employed, for the work you did most recently)?

- 0 Excellent preparation
- 1 Good preparation
- 2 Adequate preparation
- 3 Inadequate preparation
- 4 Does not apply

19. The following statements reflect some of the outcomes of college education or training. In the first column, please circle the letters of those outcomes which you realized when you attended our college. In the second column, circle the letters of those outcomes you feel you have realized or are realizing since you left our college.

These are outcomes I realized while I attended your college

These are outcomes that I have realized or am realizing since I left your college

- Academic Goals
- 121 A 122 A An increase in my knowledge and understanding in an academic field
 - 123 B 124 B A certificate or degree
 - 125 C 126 C Completed the courses necessary to transfer to another educational institution
 - 127 D 128 D Other (specify) _____
- Career Preparation Goals
- 129 E 130 E Discovered career interests
 - 131 F 132 F Formulated long term career plans and/or goals
 - 133 G 134 G Prepared for a new career
 - 135 H 136 H Other (specify) _____
- Job- or Career-Improvement Outcomes
- 137 I 138 I Improved knowledge, technical skills, and/or competencies for job or career
 - 139 J 140 J Increased chances for a raise and/or promotion
 - 141 K 142 K Other (specify) _____
- Social and Cultural Participation Outcomes
- 143 L 144 L Became actively involved in student life and campus activities
 - 145 M 146 M Increased participation in cultural and social events
 - 147 N 148 N Met people I otherwise might not have known
 - 149 O 150 O Other (specify) _____
- Personal Development and Enrichment Outcomes
- 151 P 152 P Increased self-confidence
 - 153 Q 154 Q Improved leadership skills
 - 155 R 156 R Improved ability to get along with others
 - 157 S 158 S Learned skills that will enrich my daily life or make me a more complete person
 - 159 T 160 T Developed ability to be independent, self-reliant, and adaptable
 - 161 U 162 U Other (specify) _____

20. From the list of outcomes in question 19, please select the three that now seem to you to be the most important outcomes (b) having attended our college and enter the codes below. For example, if you now think that the most important outcome for you was the "increased leadership skills" enter the letter Q in the first box.

Most Important Second Most Important Third Most Important

163 164 165

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21. Since you completed your program at our college, have you been employed for pay?

- 0 Yes, I am currently employed full-time
- 1 Yes, I am currently employed part-time
- 2 Yes, I was employed after leaving your college but currently am unemployed and looking for work
- 3 Yes, I was employed after leaving your college but currently am unemployed and not looking for work
- 4 No, I was never employed after leaving your college

If No, skip to the Additional Questions Section

22. a. What was the first job you had after you completed your program at our college (e.g., accountant, engineer, salesperson, teacher)

b. What is your current job? If you are not currently employed, what was your most recent job?

c. Now look at List B: Occupational Titles and enter in the boxes below the code numbers of the categories in which your first job and your current job fall

First job
167-168

Current job
169-170

23. What was your annual salary or wage in the first job you had after you completed your program at our college? What is your current annual salary or wage? Circle the number in the first column which best describes your salary in the first job you had after completing your program at our college. Circle the number in the second column which best describes your current salary. If either job was part-time, give the approximate full-time equivalent annual salary.

Starting salary in your first job after college

Salary at current job

- | | | |
|---|---|-------------------------------|
| 0 | 0 | Less than \$12,000 per year |
| 1 | 1 | \$12,000 to \$17,999 per year |
| 2 | 2 | \$18,000 to \$23,999 per year |
| 3 | 3 | \$24,000 to \$29,999 per year |
| 4 | 4 | \$30,000 to \$35,999 per year |
| 5 | 5 | \$36,000 to \$41,999 per year |
| 6 | 6 | \$42,000 per year or more |
| 7 | 7 | Does not apply |

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.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	
173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	

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

APPENDIX B

**The Four-Year Colleges and
Universities Questionnaires**

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Entering-Student Questionnaire

(Four-Year Institutions)

PERSONAL IDENTIFICATION SECTION

Do not complete this section unless you are asked to do so. *Please print.*

LAST NAME	<input type="text"/>	FIRST NAME	<input type="text"/>	MIDDLE INITIAL	<input type="text"/>
	1-12		13-20		21
ANY OTHER NAME WHICH MAY APPEAR ON YOUR SCHOOL OR COLLEGE RECORDS _____					
STUDENT IDENTIFICATION NUMBER	<input type="text"/>	TELEPHONE NUMBER	<input type="text"/>		
	22-40		2		
PERMANENT MAILING ADDRESS NUMBER AND STREET	<input type="text"/>				
	11-55				
CITY	<input type="text"/>	STATE	<input type="text"/>	ZIP CODE	<input type="text"/>
	56-70		71-72		73-77

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121

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 below.

Sample:

4. Are you currently married?

- 0 Yes
 1 No

If you are not currently married, you would circle the number 1

1. What is your sex?

- 0 Female
 1 Male

2. How do you describe yourself? Circle one.

- 0 American Indian or Alaskan Native
 1 Asian, Pacific Islander, or Filipino
 2 Black or Afro-American
 3 Hispanic, Chicano, or Spanish-speaking American
 4 White or Caucasian
 5 Other _____

3. How old are you?

- 0 Under 18
 1 18 to 22 years
 2 23 to 25 years
 3 26 to 30 years
 4 31 to 40 years
 5 41 to 50 years
 6 51 to 60 years
 7 61 years or more

4. Are you currently married?

- 0 Yes
 1 No

5. Do you feel that you have a permanent handicap? Circle all that apply.

- 0 No
 1 Yes, restricted mobility
 2 Yes, restricted hearing
 3 Yes, restricted vision
 4 Yes, but I prefer not to record it on this form
 5 Other _____

6. a. Have you previously enrolled in any postsecondary educational institution? If you have enrolled in more than one, please circle the most recent.

- 0 No, I have not been previously enrolled
 1 Yes, at this institution
 2 Yes, at a public two-year college
 3 Yes, at a public four-year college or university
 4 Yes, at a private college or university
 5 Yes, at a vocational/technical school, hospital school of nursing, trade school, or business school
 6 Other _____

b. If you have attended another college, please write in the name of the one you most recently attended

7. The following statements reflect the goals of many college students. Please circle the letters of all those goals that are important to you

Academic Goals

- 89 A To increase my knowledge and understanding in an academic field
 90 B To obtain a certificate or degree
 91 C To complete courses necessary to transfer to another educational institution

92 D Other _____

Career-Preparation Goals

- 93 E To discover my career interests
 94 F To formulate long-term career plans and/or goals
 95 G To prepare for a new career

96 H Other _____

Job- or Career-Improvement Goals

- 97 I To improve my knowledge, technical skills, and/or competencies required for my job or career
 98 J To increase my chances for a raise and/or promotion

99 K Other _____

Social- and Cultural-Participation Goals

- 100 L To become actively involved in student life and campus activities
 101 M To increase my participation in cultural and social events

102 N To meet people

103 O Other _____

Personal-Development and Enrichment Goals

- 104 P To increase my self-confidence
 105 Q To improve my leadership skills
 106 R To improve my ability to get along with others
 107 S To learn skills that will enrich my daily life or make me a more complete person
 108 T To develop my ability to be independent, self-reliant, and adaptable

109 U Other _____

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 Third Most Important
 110 111 112

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

Current	Ultimate	
0	0	Not seeking a certificate or degree
1	1	Certificate
2	2	Associate degree
3	3	Bachelor's degree
4	4	Master's degree
5	5	Specialist degree (e.g., Ed.S.)
6	6	Professional degree (e.g., medicine, law, theology)
7	7	Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)

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

b. Now look at List A: Majors and Areas of Study and enter in the boxes below the code number of the category in which your major or area of study falls.

115-118

11. What is your intended enrollment status?

- 0 Primarily for credit — full-time (12 or more hours each term enrolled)
 1 Primarily for credit — part-time (less than 12 hours each term enrolled)
 2 Primarily not for credit

12. What will your primary employment or occupation 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 employed outside of the home
 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.

- 121 A Academic reputation of our college
 122 B Course offerings
 123 C Former student's advice
 124 D Teacher's or friend's advice
 125 E Counselor's advice
 126 F Employer's suggestion
 127 G Will help me retain my current employment
 128 H Costs
 129 I Availability of financial aid
 130 J Institution's social reputation
 131 K Close to home
 132 L Wanted a change in scenery or location
 133 M Range and availability of student services
 134 N I can identify with fellow students
 135 O Inconvenient to go elsewhere
 136 P Other _____

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

- 137 0 From people at my high school
 138 1 From relatives, friends, or acquaintances
 139 2 From a representative of this college
 140 3 From a college placement service or some other education information service
 141 4 From a college catalog
 142 5 From material I received in the mail
 143 6 From material I read in a newspaper or magazine
 144 7 From a radio or TV advertisement
 145 8 From an information display at an education fair, shopping center, county fair, or similar location
 146 9 Other _____

15. a. Was our college your first choice?

- 0 Yes
 1 No

b. If no, what kind of college was your first choice?

- 0 A public two-year college
 1 A public four-year college or university
 2 A private college or university
 3 A vocational/technical school, hospital school of nursing, trade school, or business school
 4 Other _____

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

16. Do you plan to apply for financial aid at our college?

- 0 Yes, I have already applied
 1 Yes, I plan to apply
 2 No, I do not think I will ever apply

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

Circle one.

- 150 {
- 0 Weekday mornings
 - 1 Weekday afternoons
 - 2 Weekday evenings
 - 3 Anytime during the week
 - 4 Anytime during the weekend
 - 5 No preference

18. Do you plan to enroll at our college next term?

- 151 {
- 0 Yes
 - 1 No, I will complete my program this term
 - 2 No, but I plan to return at some future date
 - 3 No, I plan to transfer to another college
 - 4 No, I have no plans for additional education at this time
 - 5 I do not yet know my plans for next term

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.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	

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

DUPLICATE

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	Communications
0700	Computer and Information Sciences
0800	Education
0900	Engineering
1000	Fine and Applied Arts (includes Art, Dance, Drama, Music, etc.)
1100	Foreign Languages
1200	Health Professions
1300	Home Economics (includes Clothing and Textiles, Institutional Housekeeping, and Food Service Management, etc.)
1400	Law
1500	Letters (includes Creative Writing, Literature, Philosophy, Speech, etc.)
1600	Library Science
1700	Mathematics
1800	Military Sciences
1900	Physical Sciences (includes Chemistry, Physics, Earth Sciences, etc.)
2000	Psychology
2100	Public Affairs and Social Services
2200	Social Sciences (includes Anthropology, Economics, History, Political Science, Sociology, etc.)
2300	Theology and Religion
4900	Interdisciplinary Studies
6000	Other
7000	Undecided but probably program of four or more years

Programs usually requiring less than four years of study

5000	Business and Commerce Technologies (includes Accounting, Banking, Commercial Art, Hotel and Restaurant Management, etc.)
5005	Secretarial Technologies (includes Office Supervising and Management, Stenographic and Typing Technology, etc.)
5006	Personal Service Technologies (includes Stewardess Training, Cosmetologist, etc.)
5100	Data Processing Technologies (includes Computer Programming, Key punching, etc.)
5200	Health Services and Paramedical Technologies (includes Dental and Medical Assistant Technology, LPN, 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 Technologies (includes Carpentry, Plumbing, Sheet Metal, Heating, etc.)
5400	Natural Science Technologies (includes Agriculture Technology, Environmental Health Technology, Forestry and Wildlife Technology, etc.)
5404	Food Services Technologies (includes Food Service Supervising, Institutional Food Preparation, etc.)
5500	Public Service Technologies (includes Law Enforcement Technology, Teacher Aide Training, Fire Control Technology, Public Administration Technology, etc.)
5506	Recreation and Social Work Related Technologies
8000	Other
9000	Undecided but probably less than four year program

NOTE: On the actual SOIS Questionnaires, LIST A is printed 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 Technologists and Technicians
- 08 Marketing and Sales Occupations
- 09 Material Handlers, Equipment Cleaners, and Laborers
- 10 Mechanics and Repairers
- 11 Military Occupations
- 12 Natural Scientists and Mathematicians
- 13 Nurses, Pharmacists, Dietitians, Therapists, and Physicians' Assistants
- 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 Workers, Religious Workers, and Lawyers
- 17 Teachers, Librarians, and Counselors
- 18 Technologists and Technicians (except Health)
- 19 Transportation and Material-Moving Occupations
- 20 Writers, Artists, Editors, and Athletes
- 21 Other

More questions on page 4 

NOTE: LIST B, printed on the backside of the panel showing LIST A, is included only with the Recent-Alumni Questionnaire; in all other questionnaires this panel is blank.

Continuing-Student Questionnaire

(Four-Year Institutions)

PERSONAL IDENTIFICATION SECTION

Do not complete this section unless you are asked to do so. *Please print.*

LAST NAME	<input type="text"/>	FIRST NAME	<input type="text"/>	MIDDLE INITIAL	<input type="text"/>
	1-12		13-20		21
ANY OTHER NAME WHICH MAY APPEAR ON YOUR SCHOOL OR COLLEGE RECORDS _____					
STUDENT IDENTIFICATION NUMBER	<input type="text"/>	TELEPHONE NUMBER	_____		
	22-40				
PERMANENT MAILING ADDRESS NUMBER AND STREET	<input type="text"/>				
	01-55				
CITY	<input type="text"/>	STATE	<input type="text"/>	ZIP CODE	<input type="text"/>
	56-70		71-72		73-77

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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 below.

Sample:

4. Are you currently married?

- 0 Yes
 1 No

If you are not currently married, you would circle the number 1.

1. What is your sex?

- 0 Female
 1 Male

2. How do you describe yourself? Circle one.

- 0 American Indian or Alaskan Native
 1 Asian, Pacific Islander, or Filipino
 2 Black or Afro-American
 3 Hispanic, Chicano, or Spanish-speaking American
 4 White or Caucasian
 5 Other _____

3. How old are you?

- 0 Under 18
 1 18 to 22 years
 2 23 to 25 years
 3 26 to 30 years
 4 31 to 40 years
 5 41 to 50 years
 6 51 to 60 years
 7 61 years or more

4. Are you currently married?

- 0 Yes
 1 No

5. Do you feel that you have a permanent handicap? Circle all that apply.

- 0 No
 1 Yes, restricted mobility
 2 Yes, restricted hearing
 3 Yes, restricted vision
 4 Yes, but I prefer not to record it on this form
 5 Other _____

6. How long have you been at our college?

- 0 One term
 1 One year
 2 Two years
 3 Three years
 4 Four years
 5 Five years
 6 Six years
 7 More than six years

7. The following statements reflect the goals of many college students. In the first column, please circle the letters of those goals that are important to you at this time. In the second column, circle the letters of those goals you feel you are achieving or have achieved.

These goals are important to me at this time

These goals I am achieving or have achieved

- | | | <u>Academic Goals</u> | |
|-----|---|--|--|
| 89 | A | 90 | A To increase my knowledge and understanding in an academic field |
| 91 | B | 92 | B To obtain a certificate or degree |
| 93 | C | 94 | C To complete courses necessary to transfer to another educational institution |
| 95 | D | 96 | D Other _____ |
| | | <u>Career-Preparation Goals</u> | |
| 97 | E | 98 | E To discover career interests |
| 99 | F | 100 | F To formulate long-term career plans and/or goals |
| 101 | G | 102 | G To prepare for a new career |
| 103 | H | 104 | H Other _____ |
| | | <u>Job- or Career-Improvement Goals</u> | |
| 105 | I | 106 | I To improve my knowledge, technical skills and/or competencies for my job or career |
| 107 | J | 108 | J To increase my chances for a raise and/or promotion |
| 109 | K | 110 | K Other _____ |
| | | <u>Social- and Cultural-Participation Goals</u> | |
| 111 | L | 112 | L To become actively involved in student life and campus activities |
| 113 | M | 114 | M To increase my participation in cultural and social events |
| 115 | N | 116 | N To meet people |
| 117 | O | 118 | O Other _____ |
| | | <u>Personal-Development and Enrichment Goals</u> | |
| 119 | P | 120 | P To increase my self-confidence |
| 121 | Q | 122 | Q To improve my leadership skills |
| 123 | R | 124 | R To improve my ability to get along with others |
| 125 | S | 126 | S To learn skills that will enrich my daily life or make me a more complete person |
| 127 | T | 128 | T To develop my ability to be independent, self-reliant, and adaptable |
| 129 | U | 130 | U Other _____ |

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 important goal is "To obtain a certificate or degree," enter the letter B in the first box.

Most Important Second Most Important Third Most Important
 111 112 111

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

Current	Ultimate	
0	0	Not seeking a certificate or degree
1	1	Certificate
2	2	Associate degree
3	3	Bachelor's degree
4	4	Master's degree
5	5	Specialist degree (e.g., Ed.S.)
6	6	Professional degree (e.g., medical, law, theology)
7	7	Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)

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

b. Now look at List A: Majors and Areas of Study and enter in the boxes below the code number of the category in which your major or area of study falls

136-139

11. What is your intended enrollment status?

- 140 { 0. Primarily for credit — full-time (12 or more hours each term enrolled)
 1. Primarily for credit — part-time (less than 12 hours each term enrolled)
 2. Primarily not for credit

12. What is your primary employment or occupation status at this time? Circle the most appropriate response.

- 141 { 0. Employed more than half time
 1. Employed half time or less
 2. Homemaker, not employed outside of the home
 3. Not employed but would like to work
 4. Not employed and do not care to work while attending college

13. When would you prefer to take your classes?

- 142 { 0. Weekday mornings
 1. Weekday afternoons
 2. Weekday evenings
 3. Anytime during the week
 4. Anytime during the weekend
 5. No preference

14. Do you plan to enroll at our college next term?

- 141 { 0. Yes
 1. No, I will complete my program this term
 2. No, but I plan to return at some future date
 3. No, I plan to transfer to another college
 4. No, I have no plans for additional education at this time
 5. I do not yet know my plans for next term

15. Concerning financial aid, which of the following is true for you?

- 144 { 0. I have received financial aid
 1. I have applied for financial aid but was denied
 2. I have not applied for financial aid but plan to apply in the future
 3. I do not think I will ever apply

16. The following are services provided by colleges. How would you evaluate these services as provided by our college? For each service, circle the number of the response that is most appropriate.

	I did not know about this service	I knew about this service but did not use it	I used this service and was satisfied with it	I used this service but was not satisfied with it	
145	0	1	2	3	Admissions
146	0	1	2	3	Registration
147	0	1	2	3	Business office
148	0	1	2	3	Academic advising
149	0	1	2	3	Guidance, counseling, and testing
150	0	1	2	3	Reading, writing, math, and study-skills improvement
151	0	1	2	3	Tutoring
152	0	1	2	3	Minority affairs
153	0	1	2	3	College cultural programs
154	0	1	2	3	Recreation and athletic programs
155	0	1	2	3	Financial aid
156	0	1	2	3	Student employment
157	0	1	2	3	Career planning
158	0	1	2	3	Job placement
159	0	1	2	3	Housing services
160	0	1	2	3	Cafeteria
161	0	1	2	3	Health services
162	0	1	2	3	Library
163	0	1	2	3	Child care
164	0	1	2	3	Bookstore
165	0	1	2	3	Parking
166	0	1	2	3	Campus security
167	0	1	2	3	Other _____

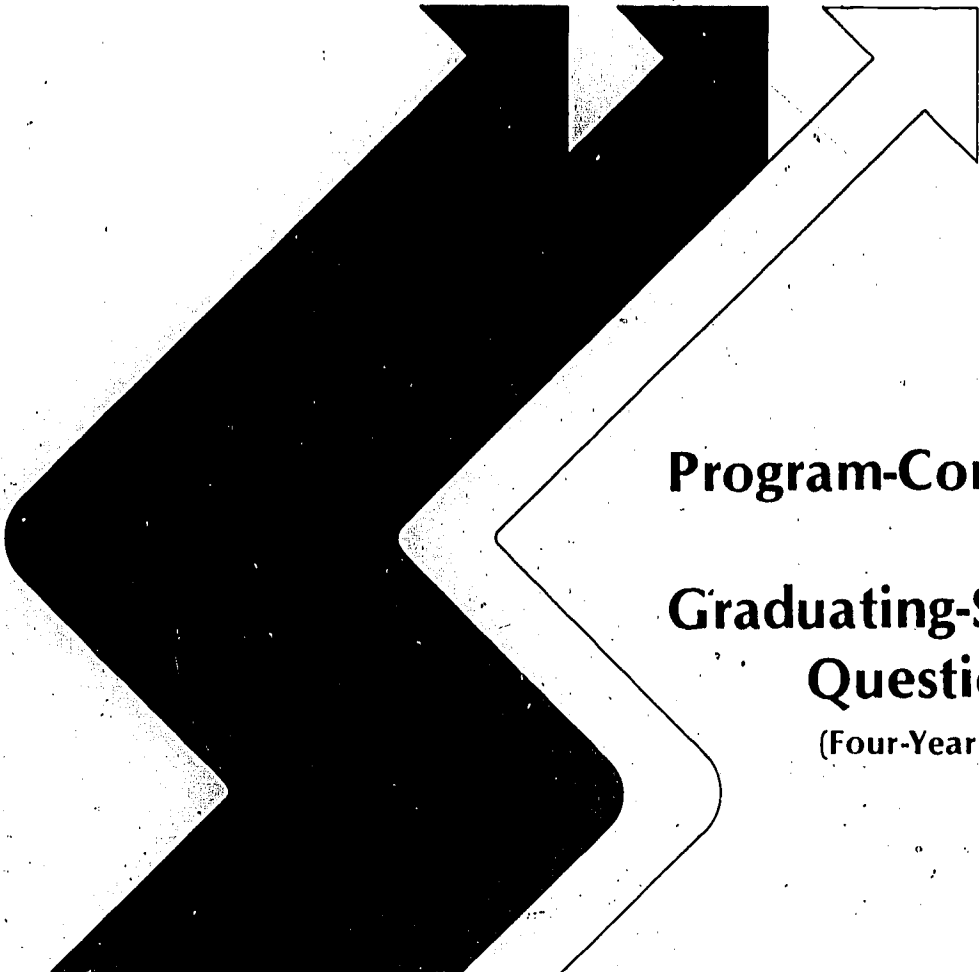
ADDITIONAL QUESTIONS SECTION

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.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
168	169	170	171	172	173	174	175	176	177	178	179	180	181	182

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

SPRING 2014



Program-Completer and Graduating-Student Questionnaire (Four-Year Institutions)

PERSONAL IDENTIFICATION SECTION
Do not complete this section unless you are asked to do so. *Please print.*

LAST NAME	<input type="text"/>	FIRST NAME	<input type="text"/>	MIDDLE INITIAL	<input type="text"/>
	1-12		13-20		21

ANY OTHER NAME WHICH MAY APPEAR ON YOUR SCHOOL OR COLLEGE RECORDS _____

STUDENT IDENTIFICATION NUMBER	<input type="text"/>	TELEPHONE NUMBER	_____
	22-30		

PERMANENT MAILING ADDRESS NUMBER AND STREET _____

CITY	<input type="text"/>	STATE	<input type="text"/>	ZIP CODE	<input type="text"/>
	50-70		71-72		73-77

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 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?

- 0 Yes
 1 No

If you are not currently married, you would circle the number 1

1. What is your sex?

- 0 Female
 1 Male

2. How do you describe yourself? Circle one.

- 0 American Indian or Alaskan Native
 1 Asian, Pacific Islander, or Filipino
 2 Black or Afro-American
 3 Hispanic, Chicano, or Spanish-speaking American
 4 White or Caucasian
 5 Other _____

3. How old are you?

- 0 Under 18
 1 18 to 22 years
 2 23 to 25 years
 3 26 to 30 years
 4 31 to 40 years
 5 41 to 50 years
 6 51 to 60 years
 7 61 years or more

4. Are you currently married?

- 0 Yes
 1 No

5. Do you feel that you have a permanent handicap?
 Circle all that apply.

- 0 No
 1 Yes, restricted mobility
 2 Yes, restricted hearing
 3 Yes, restricted vision
 4 Yes, but I prefer not to record it on this form
 5 Other _____

6. How long have you been at our college?

- 0 One term
 1 One year
 2 Two years
 3 Three years
 4 Four years
 5 Five years
 6 Six years
 7 More than six years

7. The following statements reflect the goals of many college students. In the first column, please circle the letters of those goals that are important to you at this time. In the second column, circle the letters of those goals you feel you are achieving or have achieved.

These goals are important to me at this time

These goals I am achieving or have achieved

Academic Goals

- 89 A 92 B To increase my knowledge and understanding in an academic field
 90 C 94 C To obtain a certificate or degree
 91 D 96 D To complete courses necessary to transfer to another educational institution

Career-Preparation Goals

- 97 E 100 E To discover career interests
 98 F 100 F To formulate long-term career plans and/or goals
 99 G 102 G To prepare for a new career
 101 H 104 H Other _____

Job- or Career-Improvement Goals

- 105 I 106 I To improve my knowledge, technical skills, and/or competencies for my job or career
 107 J 108 J To increase my chances for a raise and/or promotion
 109 K 110 K Other _____

Social- and Cultural-Participation Goals

- 111 L 112 L To become actively involved in student life and campus activities
 113 M 114 M To increase my participation in cultural and social events
 115 N 116 N To meet people
 117 O 118 O Other _____

Personal-Development and Enrichment Goals

- 119 P 120 P To increase my self-confidence
 121 Q 122 Q To improve my leadership skills
 123 R 124 R To improve my ability to get along with others
 125 S 126 S To learn skills that will enrich my daily life or make me a more complete person
 127 T 128 T To develop my ability to be independent, self-reliant and adaptable
 129 U 130 U Other _____

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 important goal is "To obtain a certificate or degree," enter the letter B in the first box.

Most Important 111 Second Most Important 112 Third Most Important 113

9. Which of the following are you receiving from our college?

- 134 { 0 Certificate
1 Associate degree
2 Bachelor's degree
3 Master's degree
4 Specialist degree (e.g., Ed S)
5 Professional degree (e.g., medicine, law, theology)
6 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)

10. a. Please write in your major or area of study while at our college.

b. Now look at List A: Majors and Areas of Study and enter in the boxes below the code number of the category in which your major or area of study falls.

-115 138

11. What has been your primary enrollment status while attending our college?

- 139 { 0 Primarily for credit — full-time (12 or more hours each term enrolled)
1 Primarily for credit — part-time (less than 12 hours each term enrolled)
2 Primarily not for credit

12. For the program you are now completing, were any of the credits earned from another college? Circle all that apply.

- 140 { 0 No, they were all earned here
1 Yes, from a public two-year college
2 Yes, from a public four-year college or university
3 Yes, from a private college or university
4 Yes, from a vocational/technical school, hospital school of nursing, trade school, or business school
5 Other _____

13. The following are services provided by colleges. How would you evaluate these services as provided by our college? For each service, circle the number of the response that is most appropriate.

	I did not know about this service	I knew about this service but did not use it	I used this service and was satisfied with it	I used this service but was not satisfied with it	
141	0	1	2	3	Admissions
142	0	1	2	3	Registration
143	0	1	2	3	Business office
144	0	1	2	3	Academic advising
145	0	1	2	3	Guidance, counseling, and testing
146	0	1	2	3	Reading, writing, math, and study skills improvement
147	0	1	2	3	Tutoring
148	0	1	2	3	Minority affairs
149	0	1	2	3	College cultural programs
150	0	1	2	3	Recreation and athletic programs
151	0	1	2	3	Financial aid
152	0	1	2	3	Student employment
153	0	1	2	3	Career planning
154	0	1	2	3	Job placement
155	0	1	2	3	Housing services
156	0	1	2	3	Cafeteria
157	0	1	2	3	Health services
158	0	1	2	3	Library
159	0	1	2	3	Child care
160	0	1	2	3	Bookstore
161	0	1	2	3	Parking
162	0	1	2	3	Campus security
163	0	1	2	3	Other _____

14. Have you taken any licensing or certification examination related to your major or area of study at our college?

- 164 { 0 Yes, I have taken and passed an exam
1 Yes, I have taken an exam but do not yet know the results
2 Yes, I have taken an exam but did not pass
3 No, I have not taken any exams but plan to do so
4 No, and I do not plan to take any

15. What are your current employment plans?

- 165 { 0 I plan to continue working in the same job I had prior to completing this educational program
1 I plan to work in a job I recently obtained
2 I am currently looking for a job
3 I do not plan to work outside the home
4 I have not yet formulated my employment plans
5 Other _____

16. If you currently have or will be starting a new job, to what extent is it related to your major or area of study at our college?

- 166 { 0 Directly related
1 Somewhat related
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
- 4 I am currently undecided about any additional education

b. If 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 earn?

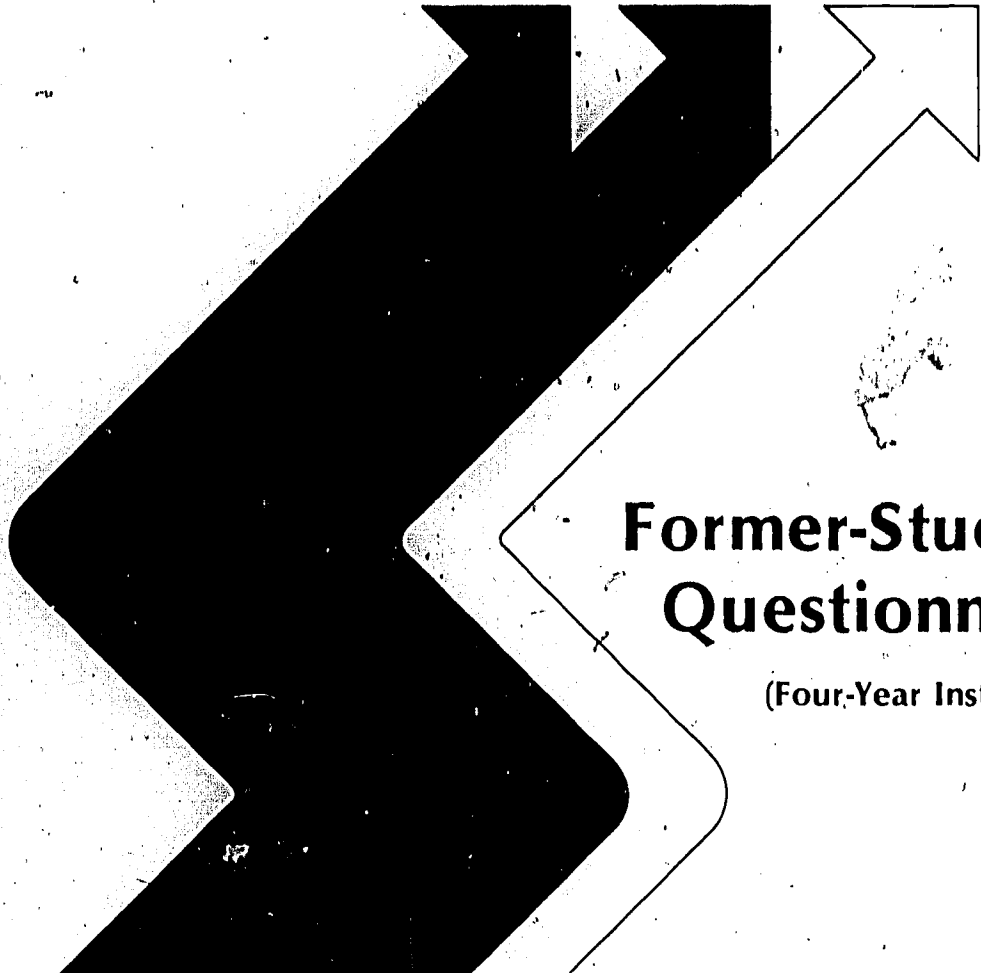
- 0 Certificate
- 1 Associate degree
- 2 Bachelor's degree
- 3 Master's degree
- 4 Specialist degree (e.g., Ed.S.)
- 5 Professional degree (e.g., medicine, law, theology)
- 6 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)

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.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	33
169	170	171	172	171	174	175	176	177	178	179	180	181	182	183	183

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



Former-Student Questionnaire

(Four-Year Institutions)

PERSONAL IDENTIFICATION SECTION			
Do not complete this section unless you are asked to do so. <i>Please print.</i>			
LAST NAME <input type="text"/> <small>11-12</small>	FIRST NAME <input type="text"/> <small>13-20</small>	MIDDLE INITIAL <input type="text"/> <small>21</small>	
ANY OTHER NAME WHICH MAY APPEAR ON YOUR SCHOOL OR COLLEGE RECORDS _____			
STUDENT IDENTIFICATION NUMBER <input type="text"/> <small>22-30</small>	TELEPHONE NUMBER _____		
PERMANENT MAILING ADDRESS STREET AND NUMBER <input type="text"/> <small>31-55</small>			
CITY <input type="text"/> <small>56-70</small>	STATE <input type="text"/> <small>71-72</small>	ZIP CODE <input type="text"/> <small>73-77</small>	

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 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?
 0 Yes
 1 No

If you are not currently married, you would circle the number 1.

1. What is your sex?

- 0 Female
 1 Male

2. How do you describe yourself? Circle one.

- 0 American Indian or Alaskan Native
 1 Asian, Pacific Islander, or Filipino
 2 Black or Afro-American
 3 Hispanic, Chicano, or Spanish-speaking American
 4 White or Caucasian
 5 Other _____

3. How old are you?

- 0 Under 18
 1 18 to 22 years
 2 23 to 25 years
 3 26 to 30 years
 4 31 to 40 years
 5 41 to 50 years
 6 51 to 60 years
 7 61 years or more

4. Are you currently married?

- 0 Yes
 1 No

5. Do you feel that you have a permanent handicap? Circle all that apply.

- 0 No
 1 Yes, restricted mobility
 2 Yes, restricted hearing
 3 Yes, restricted vision
 4 Yes, but I prefer not to record it on this form
 5 Other _____

6. How long did you attend our college?

- 0 One term
 1 One year
 2 Two years
 3 Three years
 4 Four years
 5 Five years
 6 Six years
 7 More than six 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 important to you when you attended our college. In the second column, circle the letters of those goals you feel you are achieving or have achieved as a result of your experiences at our college.

These goals were important to me

These goals I am achieving or have achieved

- | | | | |
|-----|---|--|--|
| | | <u>Academic Goals</u> | |
| 89 | A | 90 | A To increase my knowledge and understanding in an academic field |
| 91 | B | 92 | B To obtain a certificate or degree |
| 93 | C | 94 | C To complete courses necessary to transfer to another educational institution |
| 95 | D | 96 | D Other _____ |
| | | <u>Career-Preparation Goals</u> | |
| 97 | E | 98 | E To discover career interests |
| 99 | F | 100 | F To formulate long-term career plans and/or goals |
| 101 | G | 102 | G To prepare for a new career |
| 103 | H | 104 | H Other _____ |
| | | <u>Job- or Career-Improvement Goals</u> | |
| 105 | I | 106 | I To improve my knowledge, technical skills, and/or competencies in my job or career |
| 107 | J | 108 | J To increase my chances for a raise and/or promotion |
| 109 | K | 110 | K Other _____ |
| | | <u>Social- and Cultural-Participation Goals</u> | |
| 111 | L | 112 | L To become actively involved in student life and campus activities |
| 113 | M | 114 | M To increase my participation in cultural and social events |
| 115 | N | 116 | N To meet people |
| 117 | O | 118 | O Other _____ |
| | | <u>Personal-Development and Enrichment Goals</u> | |
| 119 | P | 120 | P To increase my self-confidence |
| 121 | Q | 122 | Q To improve my leadership skills |
| 123 | R | 124 | R To improve my ability to get along with others |
| 125 | S | 126 | S To learn skills that will enrich my daily life or make me a more complete person |
| 127 | T | 128 | T To develop my ability to be independent, self-reliant, and adaptable |
| 129 | U | 130 | U Other _____ |

2.

8. From the list of goals in question 7, please 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 Important Second Most Important Third Most Important
 111 112 113

9. What degree were you seeking when you attended our college?

- 144 { 0 Not seeking a certificate or degree
 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., medicine, law, theology)
 7 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)

10. a. Please write in your major or area of study at our college.

- b. Now look at List A: Majors and Areas of Study and enter in the boxes below the code number of the category in which your major or area of study falls

--	--	--	--

135-138

11. a. Was our college your first choice?

- 139 { 0 Yes
 1 No

- b. If no, what kind of college was your first choice?

- 140 { 0 A public two-year college
 1 A public four-year college or university
 2 A private college or university
 3 A vocational/technical school, hospital school, or nursing, trade school, or business school
 4 Other _____

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

12. When you left our college, what was your overall grade point average (GPA)?

- 141 { 0 4.00 to 3.01
 1 3.00 to 2.01
 2 2.00 to 1.01
 3 1.00 or less
 4 Unknown or did not have one

13. What was your primary enrollment status when you attended our college?

- 142 { 0 Primarily for credit — full-time (12 or more hours each term enrolled)
 1 Primarily for credit — part-time (less than 12 hours each term enrolled)
 2 Primarily not for credit

14. While you were enrolled, how many hours did you normally work when classes were being held?

- 143 { 0 I was not employed
 1 Employed 1-10 hours per week
 2 Employed 11-20 hours per week
 3 Employed 21-35 hours per week
 4 Employed 36 hours or more per week

15. Did you apply for financial assistance (loan or scholarship) while at our college?

- 144 { 0 Yes, and I received it
 1 Yes, but I did not receive it
 2 Yes, but I left before I found out if I received it
 3 No

16. The decision to leave a particular college can be motivated by a variety of reasons. Please circle the letters of all of the reasons that contributed to your decision to leave our college.

Academic Reasons

- 145 A Achieved my academic goals
 146 B Transferred to another college
 147 C Needed a break from college
 148 D Courses/programs I wanted were not available
 149 E Dissatisfied with my academic performance
 150 F Dissatisfied with the quality of teaching
 151 G Dissatisfied with the learning environment
 152 H Course work not what I wanted
 153 I Unsure of my academic goals
 154 J Other _____

Financial Reasons

- 155 K Did not have enough money to continue
 156 L Could not obtain sufficient financial aid
 157 M Could not earn enough money while enrolled

Other Reasons

- 158 N Other _____
 159 O Achieved my personal goals
 160 P Accepted a job or entered the military
 161 Q College experience not what I expected
 162 R Few people I could identify with
 163 S Moved out of the area
 164 T Could not work and go to school at the same time
 165 U Other responsibilities became too great
 166 V Personal problems
 167 W Other _____

17. From the list of reasons in question 16, please select the three most important reasons and enter their codes below. For example, if the most important reason was that you "Transferred to another college," enter the letter B in the first box.

Most Important 168 Second Most Important 169 Third Most Important 170

18. The following are services provided by colleges. How would you evaluate these services as provided by our college? For each service, circle the number of the response that is most appropriate.

I did not know about this service
 I knew about this service but did not use it
 I used this service and was satisfied with it
 I used this service but was not satisfied with it

- | | | | | | |
|-----|---|---|---|---|--|
| 171 | 0 | 1 | 2 | 3 | Admissions |
| 172 | 0 | 1 | 2 | 3 | Registration |
| 173 | 0 | 1 | 2 | 3 | Business office |
| 174 | 0 | 1 | 2 | 3 | Academic advising |
| 175 | 0 | 1 | 2 | 3 | Guidance, counseling, and testing |
| 176 | 0 | 1 | 2 | 3 | Reading, writing, math, and study-skills improvement |
| 177 | 0 | 1 | 2 | 3 | Tutoring |
| 178 | 0 | 1 | 2 | 3 | Minority affairs |
| 179 | 0 | 1 | 2 | 3 | College cultural programs |
| 180 | 0 | 1 | 2 | 3 | Recreation and athletic programs |
| 181 | 0 | 1 | 2 | 3 | Financial aid |
| 182 | 0 | 1 | 2 | 3 | Student employment |
| 183 | 0 | 1 | 2 | 3 | Career planning |
| 184 | 0 | 1 | 2 | 3 | Job placement |
| 185 | 0 | 1 | 2 | 3 | Housing services |
| 186 | 0 | 1 | 2 | 3 | Cafeteria |
| 187 | 0 | 1 | 2 | 3 | Health services |
| 188 | 0 | 1 | 2 | 3 | Library |
| 189 | 0 | 1 | 2 | 3 | Child care |
| 190 | 0 | 1 | 2 | 3 | Bookstore |
| 191 | 0 | 1 | 2 | 3 | Parking |
| 192 | 0 | 1 | 2 | 3 | Campus security |
| 193 | 0 | 1 | 2 | 3 | Other _____ |

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.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	21	22	23	24
195	196	197	198	199
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	26	27	28	29
200	201	202	203	204
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	31	32	33	34
205	206	207	208	209

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

19. 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
 4 I am 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.

Recent-Alumni Questionnaire

(Four-Year Institutions)

PERSONAL IDENTIFICATION SECTION

Do not complete this section unless you are asked to do so. *Please print.*

LAST NAME	<input type="text"/>	1-12	FIRST NAME	<input type="text"/>	13-20	MIDDLE INITIAL	<input type="text"/>	21
-----------	----------------------	------	------------	----------------------	-------	----------------	----------------------	----

ANY OTHER NAME WHICH MAY APPEAR ON YOUR SCHOOL OR COLLEGE RECORDS _____

STUDENT IDENTIFICATION NUMBER	<input type="text"/>	22-30	TELEPHONE NUMBER	_____
-------------------------------	----------------------	-------	------------------	-------

PERMANENT MAILING ADDRESS STREET AND NUMBER	<input type="text"/>	31-55
---	----------------------	-------

CITY	<input type="text"/>	56-70	STATE	<input type="text"/>	71-72	ZIP CODE	<input type="text"/>	73-77
------	----------------------	-------	-------	----------------------	-------	----------	----------------------	-------

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 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?

- 0 Yes
 1 No

If you are not currently married, you would circle the number 1

1. What is your sex?

- 78 0 Female
 1 Male

2. How do you describe yourself? Circle one.

- 79 0 American Indian or Alaskan Native
 1 Asian, Pacific Islander, or Filipino
 2 Black or Afro-American
 3 Hispanic, Chicano, or Spanish-speaking American
 4 White or Caucasian
 5 Other _____

3. How old are you?

- 80 0 Under 18
 1 18 to 22 years
 2 23 to 25 years
 3 26 to 30 years
 4 31 to 40 years
 5 41 to 50 years
 6 51 to 60 years
 7 61 years or more

4. Are you currently married?

- 81 0 Yes
 1 No

5. Do you feel that you have a permanent handicap?
 Circle all that apply

- 82 0 No
 83 1 Yes, restricted mobility
 84 2 Yes, restricted hearing
 85 3 Yes, restricted vision
 86 4 Yes, but I prefer not to record it on this form
 87 5 Other _____

6. How long did you attend our college?

- 88 0 One term
 1 One year
 2 Two years
 3 Three years
 4 Four years
 5 Five years
 6 Six years
 7 More than six 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 important to you when you attended our college. In the second column, circle the letters of those goals you feel you are achieving or have achieved as a result of your experiences at our college.

These goals were important to me when I attended this college

These goals I am achieving or have achieved

- | | | |
|-------|-------|---|
| | | <u>Academic Goals</u> |
| 89 A | 90 A | To increase my knowledge and understanding in an academic field |
| 91 B | 92 B | To obtain a certificate or degree |
| 93 C | 94 C | To complete courses necessary to transfer to another educational institution |
| 95 D | 96 D | Other _____ |
| | | <u>Career-Preparation Goals</u> |
| 97 E | 98 E | To discover career interests |
| 99 F | 100 F | To formulate long-term career plans and/or goals |
| 101 G | 102 G | To prepare for a new career |
| 103 H | 104 H | Other _____ |
| | | <u>Job- or Career-Improvement Goals</u> |
| 105 I | 106 I | To improve my knowledge, technical skills, and/or competencies for my job or career |
| 107 J | 108 J | To increase my chances for a raise and/or promotion |
| 109 K | 110 K | Other _____ |
| | | <u>Social- and Cultural-Participation Goals</u> |
| 111 L | 112 L | To become actively involved in student life, and campus activities |
| 113 M | 114 M | To increase my participation in cultural and social events |
| 115 N | 116 N | To meet people |
| 117 O | 118 O | Other _____ |
| | | <u>Personal-Development and Enrichment Goals</u> |
| 119 P | 120 P | To increase my self-confidence |
| 121 Q | 122 Q | To improve my leadership skills |
| 123 R | 124 R | To improve my ability to get along with others |
| 125 S | 126 S | To learn skills that will enrich my daily life or make me a more complete person |
| 127 T | 128 T | To develop my ability to be independent, self-reliant, and adaptable |
| 129 U | 130 U | Other _____ |

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

Most Important Second Most Important Third Most Important

131

132

133

9. What was the most recent certificate or degree you received from our college?

- 134 {
- 0 Certificate
 - 1 Associate degree
 - 2 Bachelor's degree
 - 3 Master's degree
 - 4 Specialist degree (e.g., Ed.S.)
 - 5 Professional degree (e.g., medicine, law, theology)
 - 6 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)

10. a. Please write in the major or area of study associated with the certificate or degree referred to in question 9.

b. Now look at **List A: Majors and Areas of Study** and enter in the boxes below the code number of the category in which your major or area of study falls.

--	--	--	--

135-138

11. If you plan to continue your education, what is the highest degree you ultimately plan to earn?

- 139 {
- 0 Certificate
 - 1 Associate degree
 - 2 Bachelor's degree
 - 3 Master's degree
 - 4 Specialist degree (e.g., Ed.S.)
 - 5 Professional degree (e.g., medicine, law, theology)
 - 6 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)

12. Have you taken any licensing or certification examination related to your major or area of study at our college?

- 140 {
- 0 Yes, I have taken and passed an exam.
 - 1 Yes, I have taken an exam but do not yet know the results.
 - 2 Yes, I have taken an exam but did not pass.
 - 3 No, I have not taken any exams, but plan to do so.
 - 4 No, and I do not plan to take any.

13. Since completing your program at our college, have you enrolled at another college?

- 141 {
- 0 Yes
 - 1 No → *If No, skip to question 19.*

14. a. After your program at our college, what kind of college, university, professional, or vocational school did you most recently attend?

- 142 {
- 0 A public two-year college
 - 1 A public four-year college
 - 2 A private college or university
 - 3 A vocational/technical school, hospital school of nursing, trade school, or business school
 - 4 Other _____

b. Please write in the name of that institution.

15. What certificate or degree were you seeking at the college referred to in question 14?

- 143 {
- 0 Certificate
 - 1 Associate degree
 - 2 Bachelor's degree
 - 3 Master's degree
 - 4 Specialist degree (e.g., Ed.S.)
 - 5 Professional degree (e.g., medicine, law, theology)
 - 6 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)

16. a. Please write in your intended major or area of study at the college referred to in question 14.

b. Now look again at **List A: Majors and Areas of Study** and enter in the boxes below the code number of the category in which your intended major or area of study at the college referred to in question 14 falls.

--	--	--	--

144-147

17. How well did our college prepare you for your additional college work?

- 148 {
- 0 Excellent preparation
 - 1 Good preparation
 - 2 Adequate preparation
 - 3 Inadequate preparation
 - 4 Does not apply

18. Did you transfer any credits from our college toward your additional college work?

- 149 {
- 0 Yes
 - 1 No, I did not try to transfer any credits
 - 2 No, I tried but they were not accepted

19. Are you currently employed?

- 150 {
- 0 Yes, I have a full-time job outside of the home
 - 1 Yes, I have a part-time job outside of the home
 - 2 No, I am not currently employed outside of the home

→ *If No, skip to question 26.*

20. a. Describe your current job (e.g., accountant, engineer, salesperson, teacher).

b. Now look at **List B: Occupational Titles** and enter in the boxes below the code number of the category in which your current job falls.

--	--

151-152

21. After completing your program at our college, how long did you look for work before obtaining your first job?
- 0 Had a job which continued after I completed my program
 - 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
 - 5 More than eight months after graduation

22. How did you find your first job?
- 0 College placement office or professor
 - 1 Professional periodicals or organizations
 - 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 your annual salary or wage in your first job?
- 0 Less than \$3,000 per year
 - 1 \$3,000 to \$5,999 per year
 - 2 \$6,000 to \$8,999 per year
 - 3 \$9,000 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 \$20,999 per year
 - 7 \$21,000 to \$23,999 per year
 - 8 \$24,000 or more per year

24. How well did our college prepare you for your first job?
- 0 Excellent preparation
 - 1 Good preparation
 - 2 Adequate preparation
 - 3 Inadequate preparation
 - 4 Not applicable to first job

25. To what extent is/was your first job related to your major or area of study at our college?
- 0 Directly related
 - 1 Somewhat related
 - 2 Not related

26. 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?
- 0 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 but could not find any

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 major or area of study at our college?
- 0 Yes
 - 1 No

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.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
160	161	162	163	164	165	166	167	168	169	170	171	172	173	174

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



Long-Term Alumni Questionnaire

(Four-Year Institutions)

PERSONAL IDENTIFICATION SECTION

Do not complete this section unless you are asked to do so. *Please print.*

LAST NAME	<input type="text"/>	FIRST NAME	<input type="text"/>	MIDDLE INITIAL	<input type="text"/>
	1-12		13-20		21
ANY OTHER NAME WHICH MAY APPEAR ON YOUR SCHOOL OR COLLEGE RECORDS _____					
STUDENT IDENTIFICATION NUMBER	<input type="text"/>	TELEPHONE NUMBER	_____		
	22-30				
PERMANENT MAILING ADDRESS NUMBER AND STREET	<input type="text"/>				
	31-55				
CITY	<input type="text"/>	STATE	<input type="text"/>	ZIP CODE	<input type="text"/>
	56-70		71-72		73-77
IF THIS IS A NEW ADDRESS PLEASE CHECK HERE	<input type="checkbox"/>				
	78				

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 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?

0 Yes

① No

If you are not currently married, you would circle the number 1

1. What is your sex?

0 Female

① Male

2. How do you describe yourself? Circle one.

0 American Indian or Alaskan Native

1 Asian, Pacific Islander, or Filipino

2 Black or Afro-American

3 Hispanic, Chicano, or Spanish-speaking American

4 White or Caucasian

5 Other _____

3. How old are you?

0 Under 18 years

1 18 to 22 years

2 23 to 25 years

3 26 to 30 years

4 31 to 40 years

5 41 to 50 years

6 51 to 60 years

7 61 years or more

4. Are you currently married?

0 Yes

① No

5. Do you feel that you have a permanent handicap? Circle all that apply.

0 No

1 Yes, restricted mobility

2 Yes, restricted hearing

3 Yes, restricted vision

4 Yes, but I prefer not to record it on this form

5 Other _____

6. How long did you attend our college?

0 One or two terms

1 One year

2 Two years

3 Three years

4 Four years

5 Five years

6 Six years

7 More than six years

7. When did you complete your program at our college? Please enter the year in the box below.

'90-'91

1 9

8. What was the most recent certificate or degree you received from our college?

0 Certificate

1 Associate degree

2 Bachelor's degree

3 Master's degree

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

5 Professional degree (e.g., medicine, law, theology)

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

9. a. Please write in the major or area of study associated with the degree or certificate referred to in question 8. If you received a degree or certificate with a "double" major, please write in both.

b. Now look at List A: Majors and Areas of Study and enter in the boxes below the code number(s) of the category(ies) in which your major(s) or area(s) of study fall(s).

93-96

□ □ □ □

97-100

□ □ □ □

(Use this second box only if you took a "double" major.)

10. Since completing your program at our college, have you undertaken further formal study?

0 Yes

① No

If No, skip to question 17.

11. a. After your program at our college what kind of college, university, professional, or vocational school did you most recently attend?

0 A public two-year college

1 A public four-year college, university or professional school

2 A private college, university or professional school

3 A vocational/technical school, hospital school of nursing, trade school, or business school

4 Other

(Specify): _____

b. Please write in the name of that institution.

103-106

□ □ □ □

(Please do not write in this box.)

12. What degree or certificate were you seeking at the college, university, professional, or vocational school referred to in question 11?

0 Certificate

1 Associate degree

2 Bachelor's degree

3 Master's degree

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

5 Professional degree (e.g., medicine, law, theology)

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

7 No degree or certificate (e.g., job advancement, self-enrichment)

13. Did you complete the requirements of the certificate or degree indicated in question 12?

- 108
- 0 Yes
 - 1 No, but I am still enrolled seeking it
 - 2 No, but I still plan to complete it even though I am not currently enrolled
 - 3 No, and I do not expect to complete it
 - 4 Does not apply

14. a. Please write in the major or area of study associated with the degree or certificate referred to in question 12. If you were pursuing a degree or certificate with a "double" major, please write in both.

b. Now look again at List A: Majors and Areas of Study and enter in the boxes below the code number(s) of the category(ies) in which your major(s) or area(s) of study fall(s).

109-112

113-116 (Use this second box only if you pursued a "double" major.)

15. How well did our college prepare you for your additional formal education?

- 117
- 0 Excellent preparation
 - 1 Good preparation
 - 2 Adequate preparation
 - 3 Inadequate preparation
 - 4 Does not apply

16. How would you evaluate the counseling and advisement we gave you about your options for further formal education after you completed your program at our college?

- 118
- 0 Excellent
 - 1 Good
 - 2 Adequate
 - 3 Inadequate
 - 4 Does not apply

17. What is the highest degree or certificate you ultimately plan to earn? (If this is the same as the degree you now hold, circle that degree.)

- 119
- 0 Certificate
 - 1 Associate degree
 - 2 Bachelor's degree
 - 3 Master's degree
 - 4 Specialist degree (e.g., Ed.S.)
 - 5 Professional degree (e.g., medicine, law, theology)
 - 6 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)
 - 7 Does not apply

18. How well did our college prepare you for the work you are now doing (or if you are not currently employed, for the work you did most recently)?

- 120
- 0 Excellent preparation
 - 1 Good preparation
 - 2 Adequate preparation
 - 3 Inadequate preparation
 - 4 Does not apply

19. The following statements reflect some of the outcomes of college education or training. In the first column, please circle the letters of those outcomes which you realized when you attended our college. In the second column, circle the letters of those outcomes you feel you have realized or are realizing since you left our college.

These are outcomes I realized while I attended your college

These are outcomes that I have realized or am realizing since I left your college

Academic Goals

- 121 A 122 A An increase in my knowledge and understanding in an academic field
- 123 B 124 B A certificate or degree
- 125 C 126 C Completed the courses necessary to transfer to another educational institution
- 127 D 128 D Other (specify) _____

Career-Preparation Goals

- 129 E 130 E Discovered career interests
- 131 F 132 F Formulated long-term career plans and/or goals
- 133 G 134 G Prepared for a new career
- 135 H 136 H Other (specify) _____

Job- or Career-Improvement Outcomes

- 137 I 138 I Improved knowledge, technical skills, and/or competencies for job or career
- 139 J 140 J Increased chances for a raise and/or promotion
- 141 K 142 K Other (specify) _____

Social- and Cultural-Participation Outcomes

- 143 L 144 L Became actively involved in student life and campus activities
- 145 M 146 M Increased participation in cultural and social events
- 147 N 148 N Met people I otherwise might not have known
- 149 O 150 O Other (specify) _____

Personal Development and Enrichment Outcomes

- 151 P 152 P Increased self-confidence
- 153 Q 154 Q Improved leadership skills
- 155 R 156 R Improved ability to get along with others
- 157 S 158 S Learned skills that will enrich my daily life or make me a more complete person
- 159 T 160 T Developed ability to be independent, self-reliant, and adaptable
- 161 U 162 U Other (specify) _____

20. From the list of outcomes in question 19, please select the three that now seem to you to be the most important outcomes of having attended our college and enter the codes below. For example, if you now think that the most important outcome for you was the "increased leadership skills" enter the letter Q in the first box

Most Important Second Most Important Third Most Important

163 164 165

21. Since you completed your program at our college, have you been employed for pay?

- 0 Yes, I am currently employed full-time
- 1 Yes, I am currently employed part-time
- 2 Yes, I was employed after leaving your college but currently am unemployed and looking for work
- 3 Yes, I was employed after leaving your college but currently am unemployed and not looking for work
- 4 No, I was never employed after leaving your college

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→ If No, skip to the Additional Questions Section

22. a. What was the first job you had after you completed your program at our college (e.g. accountant, engineer, salesperson, teacher)

b. What is your **current** job? If you are not currently employed, what was your most recent job?

c. Now look at **List B: Occupational Titles** and enter in the boxes below the code numbers of the categories in which your first job and your current job fall.

First Job
167-168

Current Job
169-170

23. What was your annual salary or wage in the first job you had after you completed your program at our college? What is your current annual salary or wage? Circle the number in the first column which best describes your salary in the first job you had after completing your program at our college. Circle the number in the second column which best describes your current salary. If either job was part-time, give the approximate full-time equivalent annual salary.

Starting salary in your first job after college

Salary at current job

- | | | |
|---|---|-------------------------------|
| 0 | 0 | Less than \$12,000 per year |
| 1 | 1 | \$12,000 to \$17,999 per year |
| 2 | 2 | \$18,000 to \$23,999 per year |
| 3 | 3 | \$24,000 to \$29,999 per year |
| 4 | 4 | \$30,000 to \$35,999 per year |
| 5 | 5 | \$36,000 to \$41,999 per year |
| 6 | 6 | \$42,000 per year or more |
| 7 | 7 | Does not apply |

171

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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.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	
173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	

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

APPENDIX C

Samples of Local Questionnaire Items

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Samples of Local Questionnaire 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 to 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 on each SOIS questionnaire, 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-, and 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 capability to match questionnaire responses with master-file information.

Locator Questions

An institution may be interested in specific information about where its students have previously 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 states/regions is your permanent residence located?

A multicampus institution that has not otherwise coded its questionnaires probably would want to add a local question asking respondents to indicate campuses at which they were enrolled.

Mobility Questions

Some institutions may be interested not only in the areas in which their students have lived and their current local and permanent residences, but also in where 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 attending our college, were you a legal resident of the state of _____?
- In what state are you currently residing?
- What are your long-term plans in terms of residence?
- In what state is your 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 to the campus?
- How long does it take you to get from your residence 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 _____, 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 entering students if they plan to apply for financial aid, 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 patterns of financing. Accurate estimates can be determined, depending on the level of complexity and number of local questions added.

A determination of financial background would require the student to respond to a range of 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 where students lived 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 borrowed 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 in 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 about the institution itself. 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 prior 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 postsecondary 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 more 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 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 added 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.

APPENDIX D

Planning Chart for Survey Activities

ACTIVITY	PERSON/OFFICE RESPONSIBLE	TARGET DATE
1. Decide on the objectives of the survey and the specific study questions to be answered.		
2. Meet with a committee of potential users of the survey to discuss and if necessary modify survey objectives and study questions.		
3. Finalize study objectives and prepare a schedule for survey administration.		
4. Study the appropriate questionnaire to ensure that it will provide data appropriate to the survey objectives.		
5. Decide on an appropriate sampling strategy.		
6. Establish a method for identifying the students in the sample (total) population to be surveyed.		
7. Decide on a method for distributing questionnaires.		
8. Produce a complete list of those to be surveyed; if using a computer to generate the list, also generate a computer file containing all students to be surveyed.		
9. Prepare all survey materials for distribution (questionnaires, cover letters, follow-up materials, mailing envelopes, return envelopes, postage, address labels, tracking sheets).		
10. Prepare a set of follow-up procedures.		
11. Administer or mail out questionnaires.		
12. As returns are obtained, maintain tracking sheets, implement appropriate follow-up procedures.		
13. Edit and code returned questionnaires; prepare for submission to SOIS Questionnaire-Analysis Service.		
14. Integrate data with institutional master-file data.		
15. Document analysis printouts.		
16. Prepare initial reports; meet with users committee on results obtained.		
17. Respond to requests for information on demand.		

APPENDIX E

SOIS Questionnaire-Analysis Service: Output Documentation and Guidelines for Further Data Analysis

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SOIS Questionnaire-Analysis Service: Output Documentation and Guidelines for Further Data Analysis

Accompanying each report produced by the SOIS Questionnaire-Analysis Service is documentation on how the data were organized for computer analysis and on how the cross-tabulations included in the report were prepared. This documentation is contained in two tables—the Question Table and the Cross-Tabulation Report—which appear at the end of each report immediately following the index. The purpose of this appendix is to briefly describe each of these tables, and to show how the information contained in them can be used in designing further local data analyses of the output tapes that can be provided by the analysis service.

The Question Table

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 individual student records on the computer tape.) A sample Question Table is illustrated in figure E.1.

FIGURE E.1

SAMPLE QUESTION TABLE FOR SOIS ANALYSIS

TITLE — COLLEGE BOARD/N.C.H.E.M.S STUDENT OUTCOMES INFORMATION SERVICES (SOIS)
SURVEY OF ENTERING STUDENTS

QUALIFICATIONS —
DATE — 12/08/78, PROJECT — 1, SAMPLE — 1; SKIP 0 RECORDS, END ANALYSIS AFTER 09,999 RECORDS

QUESTION TABLE CREATED BY QST 1

① QUESTION					② RESPONSES			③ PRINT			④ COUNTERS	⑤ CROSS-TAB REQUESTS	
NO	PRT#	LOC	LGTH	R#	#	SET	MODE	N/G	N	%	SUM		
001	1	05	1	1	2		N	N	0	0	0	14	01
002	2	06	1	1	5		N	N	0	0	0	42	01
003	3	07	1	1	8		N	N	0	0	0	56	01
004	4	08	1	1	2		N	N	0	0	0	14	01
005	5	09	1	5	6		N	N	0	0	0	42	02
010	6	14	1	1	7		N	N	0	0	0	42	03
020	7A	15	1	4	5		N	N	0	0	0	120	01 02 03 04
J30	7B	19	1	4	5		N	H	0	0	0	35	01
040	7C	23	1	3	3		N	N	0	0	0	21	02
050	7D	26	1	4	4		N	N	0	0	0	24	03
060	7E	30	1	6	6		N	N	0	0	0	42	04
070	8A	36	1	1	23	A	A	N	0	0	0	161	01
080	8B	37	1	1	23	A	A	N	0	0	0	161	02
090	8C	38	1	1	23	A	A	N	0	0	0	138	03
100	9A	39	1	1	6	B	N	N	0	0	0	42	04
110	9B	40	1	1	6	B	N	N	0	0	0	42	01
120	10	41	2	1	31	C	N	N	0	0	0	217	02
130	11	43	1	1	3		N	N	0	0	0	18	03
140	12	44	1	1	5		N	N	0	0	0	35	04
150	13	45	1	9	16	D	A	N	0	0	0	112	01

NOTE: See text for descriptions corresponding to numbered items.

1. **QUESTION.** This describes the identification, location, 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 also used to identify questionnaire 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.** describes the starting position of that item in the computer-tape record.
 - d) **LGTH.** describes the number of positions occupied by that item 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 number of the cross-tabulations used against this item. For example, question 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.

Cross-Tabulation Report

A sample Cross-Tabulation Report from the two-year college, Entering-Student Questionnaire is reproduced in figure E.2. 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 report helpful in understanding exactly which responses to specific questions were used in producing each cross-tabulation.

FIGURE E.2

SAMPLE CROSS-TABULATION REPORT FOR SOIS ANALYSIS

*** CROSS TABULATION REPORT ***

01 ALGORITHM - 1 001 01
 2 001 00
 3 004 01
 4 004 00
 5 005 00
 6 005 01 02 03 04 05 (1)

HEADING - MALES FEMALES NOT MARRIED MARRIED NOT HANDICAPPED HANDICAPPED
 USED ON - 001 002 003 004 020 030 070 110 150 190

02 ALGORITHM - 1 002 04
 2 002 02
 3 002 03
 4 002 00 01 05 NH
 5 130 00
 6 130 01

HEADING - ETHNIC BACKGROUND FULL PART
 WHITE BLACK HISPANIC OTHER TIME TIME (2)
 USED ON - 005 020 040 080 120 160 200

03 ALGORITHM - 1 003 00 01
 2 003 02 03
 3 003 04 05
 4 003 06
 5 003 07

HEADING - AGE
 UNDER 23 23 TO 30 31 TO 50 51 TO 60 OVER 60
 USED ON - 010 020 050 090 130 170 210

04 ALGORITHM - 1 010 02 03 04 05
 2 010 00 01
 3 020 01 02 03 04 05 06 07
 4 020 00
 5 210 03
 6 210 00

HEADING - TRANSFER IN NON-TRANSFER DEGREE NON DEGREE TRANSFER OUT RETURNING
 STUDENT STUDENT STUDENT STUDENT STUDENT STUDENT
 USED ON - 020 060 100 140 180 (3)

Note: See text for descriptions corresponding to numbered items.



1. **ALGORITHM.** This indicates the way in which student responses were selected for inclusion under a cross-tabulation heading. In this example, the algorithm 1 001 1 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* is used when a desired response to either question would result in inclusion.

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 questionnaires. The heading HANDICAPPED, for example, collapses the responses from all types of handicaps (restricted in ability, hearing, vision, and not reported) into a single analytical category.
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.

Guidelines for Further Institutional Data Analysis

In many cases, institutions will want to supplement the cross-tabulations produced by the SOIS Questionnaire-Analysis Service with data analyses of their own. These may take the form of additional cross-tabulations not provided by the analysis service, of analyses using more sophisticated statistical techniques such as correlation, factor analysis or multiple regression, or of subgroup analyses probing the relationships between student background characteristics and questionnaire responses *within* a particular subgroup of students. For example, an institution might want to know if the academic aspirations of males and females were different for different ethnic or age groups within the institution.

If questionnaire data are matched with institutional master-file data, many kinds of local data analyses are possible. For example, an institution may wish to relate earned GPA and SAT scores to expressed academic goals and attitudes toward the institution. Or the successive responses of a cohort of students to different questionnaires as the cohort progresses through the institution can be directly related to one another by means of local analyses.

The most efficient way to perform additional data analyses on SOIS Questionnaire-Analysis Service output tapes or on merged institutional master-file data sets is to use one of the many user-oriented statistical packages available. Three of the most widely used are:

1. *Statistical Package for the Social Sciences (SPSS)*. This package is highly user-oriented and includes considerable data transformation capability (recodes, and so forth) as well as a wide range of statistical packages including cross-tabulation, correlation, factor analysis, multiple regression, and discriminate analysis. The basic reference is Norman Nie, C. Hadlai Hull, Jean J. Jenkins, Karin Steinbrenner, and Dale H. Bent, *SPSS*, 2nd Edition, New York: McGraw-Hill, 1975.
2. *Statistical Analysis System (SAS)*. This package also provides numerous data manipulation and analysis options. A primary virtue of SAS is that it can read and analyze data from several different data files simultaneously, eliminating the need for merged data sets with a single record for each respondent. The basic reference is SAS Institute, Inc., *SAS User's Guide*, P.O. Box 10066, Raleigh, NC 27605.
3. *P-STAT*. This package is primarily designed for interactive computing and is particularly adapted for maintenance and transformation of data files. It also contains a wide array of statistical-analysis options. The basic reference is Shirrell and Roald Buhler, *P-STAT-78*, P-Stat Inc., P.O. Box 285, Princeton, NJ 08540.

Each of the users manuals for these three packages contains not only complete instructions on how to use the package but also a brief presentation of the assumptions and applications of particular statistical techniques. The reader is urged to consult the manuals in detail.

APPENDIX F

Sample Reports from Student-Outcomes Assessment Surveys

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 version 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 can be summarized for senior administrators or governing boards—they present highlights only. The third shows how survey results can be used to address a particular problem area. The fourth shows how the complete survey results can be documented as a reference for a variety of campus offices and officers.

These reports are intended to illustrate and to suggest ways in which institutions can use and communicate the results of SOIS surveys. Each example is accompanied by a brief introduction that presents some of the reasons why the report is constructed as it is and some of the ways in which data presented in output from the analysis service were modified to meet particular needs.

SAMPLE 1

A Summary Report for Governing Boards or Senior Administrators

The first sample is of a report on the Entering-Student Questionnaire intended for the board or senior administrators of a two-year institution. The emphasis in this report is upon providing simple, straightforward, primarily verbal information on the characteristics of an entering student body. Particular features of the report worth noting are:

- an introduction explaining briefly *why* the survey was done
- an assurance that respondents were *representative*, but no methodological details on procedures
- a description of the *characteristics* of respondents, in simple declarative statements, highlighted for easy reading
- a description of *opinions* presented in the same way
- a brief conclusion suggesting how the information will be *used* by college decisionmakers
- a brief *abstract* summarizing the principal findings, placed before the main body of text

Note that most of the information presented consists of frequency counts on major questions and that the three tables included in the report are simple. Information drawn from cross-tabular analyses is presented relatively infrequently, and then only verbally. (Many nontechnical people will simply skip over a cross-tab table rather than try to figure out what it means.) The intent is to present essential information simply and straightforwardly, while at the same time conveying the point that a great deal of additional information was communicated to relevant decisionmakers as a basis for action.

Brookside College As Entering Students See It

A Report to the Trustees

Prepared by

L.J. Walter

Abstract

This report presents some of the findings of a survey conducted by the College using the Entering-Student Questionnaire of the Student-Outcomes Information Services (SOIS) made available by NCHEMS and the College Board. It includes responses received from 76.6 percent of the students entering in the fall of 1978. 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.

Introduction

Throughout its history, Brookside College has collected considerable information from its students. Most of the information collected, however, was 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 appointment by the Board of Trustees of President Nelson in 1977 changed that. One of his first acts was to charge the institutional research office 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.

After an extensive analysis of the time and expense involved in developing suitable questionnaires, the committee decided to use the Student-Outcomes Information Services (SOIS) Questionnaires jointly developed 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.

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.

In addition to providing information on 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.

Study Methodology

Questionnaires were mailed during the spring and summer to all 2,048 students offered admission for the fall. After a follow-up mailing, we received responses from 1,569 entering students, or 76.6 percent of those offered admission for fall 1978. A comparison of the respondents with some of the known demographic

characteristics of the total entering class reveals no significant differences between the two groups. We believe that this respondent group is sufficiently large and representative to allow recommendations to be made with the confidence that the responses represent what would have been found if all entering students had responded.

General Characteristics of the Respondents

Analysis of the background characteristics of respondents revealed the following information:

- Nearly six in ten were women (58.5 percent).
- Nearly six in ten (58.3 percent) indicated that they would describe themselves as white or Caucasian; just over a third (35.8 percent) were black or Afro-American.
- The average age was just under 26 years; women were slightly older than men (26.4 versus 25.2) and white students were slightly older than nonwhite (26.3 versus 25.4).
- The average family income 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 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 unemployment, it is not surprising that nearly six in ten (59.1 percent) of the nonwhite students indicated that they had some concern about finances. Only about three in ten (31.9 percent) of the white students said they would have any concern about finances.
- Slightly over four in ten 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 in Education. About a third (33.6 percent) indicated that they had some prior work experience in their intended major field.

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.

- The most frequently cited goals had to do with career or job advancement. More than six in ten (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 (49.2 percent) said that long-range career development was one of their goals.
- Other goals had to do with self-improvement of a more personal nature. Just under half (47.6 percent) 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.

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; getting courses needed to transfer to another institution, 35.7 percent; learning how to get along better with others, 31.9 percent; improving leadership skills, 25.7 percent; improving skills for a current 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. (Responses are summarized in table 1.)

These data show that students at the College typically have as one of their goals for attending a desire to prepare for the postcollegiate 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 sixty in this state, and there are twelve 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 Brookside?

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 at Brookside. Their responses say much for the image that the College projects to potential students.

- Nearly eight out of ten (78.6 percent) reported that the range of courses available influenced their decision to attend.
- Almost as many (72.0 percent) viewed Brookside as "convenient to attend," and said that influenced their decision.
- A similar percentage perceived the College as a low-cost educational alternative (69.6 percent).

TABLE 1

GOALS OF STUDENTS ENTERING BROOKSIDE 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	47.6
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
Discover vocational interests	24.3
Get a raise or promotion	19.6
Participate in cultural and social activities	18.8

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 two in ten (18.4 percent) said that friends attending the College influenced their decision to enroll. Table 2 summarizes these responses.

TABLE 2
FACTORS INFLUENCING DECISIONS TO ATTEND

FACTOR	PERCENT OF RESPONDENTS
Course offerings	78.6
Convenient to attend	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	34.4
Identify with fellow students	18.4

In addition to describing why entering students came 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 and 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 frequently named. 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.

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 sheds light on how students find out about this institution.

- Nearly six out of ten (57.1 percent) said that information provided by a teacher or friend was important in their decision to enroll.
- Nearly four out of ten (38.5 percent) got information from former students or alumni.

Other important sources of information were our catalog, 37.6 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 representative 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. These responses are summarized in table 3.

TABLE 3
SOURCES OF INFORMATION ABOUT THE COLLEGE
IMPORTANT TO ENTERING STUDENTS

SOURCE OF INFORMATION	PERCENT OF RESPONDENTS
People 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

The information in table 3 indicates 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.

These responses also provide insights into the ways in which we might market our image. The importance of our catalog (a frequently undervalued marketing device) and direct mailings indicates 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.

Finally, these responses suggest that a traditional method of disseminating information about colleges and universities—a college representative talking to or through a high-school guidance counselor—might well be reexamined. Direct mailing and distributions of the catalog are less expensive ways of reaching prospective students than are one-on-one meetings. The College might better spend its recruiting budget in the development of more and better direct-mail campaigns than in sending recruiters out to find students.

Conclusion

The first survey of students entering Brookside Community College reveals a diverse student body but one that shares a number of characteristics. The responses show Brookside to be a true community institution, drawing a student body consistent with its mission. Students perceive the college as a convenient, low-cost alternative, with a good distribution of courses and programs suited to their future career and self-improvement goals. Knowing these goals should enable us to design even more effective programs. Furthermore, knowing the image that we project to prospective students should help us develop more effective recruitment and outreach efforts.

SAMPLE 2

A Summary Memo to Senior Executives

Often the memo format is more appropriate than the report format in communicating survey results internally. This sample of an attrition-study report abstracts critical executive information from the survey in the context of a previously established collegewide retention program. Thus one emphasis of the memo is to inform this program by comparing the results obtained on the questionnaire this year with those obtained in a previous year. Many of the principles used to construct the previous sample are apparent here as well.

TO: President Nelson, Vice-President Smith and Vice-President Monroe
FROM: G. Bennett, Director of Institutional Research
RE: 1979 Attrition Survey

As you know, for three years we have attempted to discover some of the reasons why students have not returned to Fairview Community College (FCC), by administering an annual survey of nonreturning students. The instruments used in this survey were provided by the Student-Outcomes Information Services (SOIS), jointly developed by the National Center for Higher Education Management Systems (NCHEMS) and the College Board. The purpose of this memo is to inform you of some of the salient features of this year's survey. By examining the results of the survey and by comparing it with last year's survey, we can evaluate the College Retention Program and effectively guide its future development. Chairman Briscoe and the other members of the Student Success Task Force have received a detailed report of these findings, and I will meet with them on October 17th.

During July of 1979, 2,560 students at FCC who failed to return for at least one quarter during the 1978-79 academic year were sent a questionnaire. 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 Characteristics. The following demographic profile of those not returning to FCC was obtained.

- Almost all respondents (94 percent) were Colorado residents
- Respondents ranged in age from under 18 to 65, with a median age range of 26 to 30 years
- Of the respondents, 61 percent were female and 39 percent were male
- Almost all respondents were white (94 percent)
- Almost two-thirds of the respondents (66 percent) had a high-school diploma as their highest degree

This set of background characteristics is essentially the same as we obtained in the 1977 and 1978 surveys.

Overall, about one-third of the 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 (3.01 to 4.00), with only 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 or promotion. Those not seeking either 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).

These goals are not significantly different from those reported by students who returned to FCC *except* that a higher proportion of those not returning cited employment-related goals. Added to the fact that many are leaving to seek employment, this response suggests that FCC may have fully met the needs of many of these students even though they chose not to complete degree or certificate requirements.

Reasons for Leaving. The three most important reasons respondents gave 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.

Although conflict between job and studies remained an important reason for leaving in this year's study, the percentage citing this as a major reason is about 15 percent less than last year. Implementing the Task Force's recommendation on evening classes as part of the Retention Program may have had an impact here. At the same time, more students than last year cited lack of money as a 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), financial-aid opportunities (74 percent satisfied), and employment opportunities (74 percent satisfied).

These responses were essentially the same as those obtained in last year's survey. Implementing recommended changes in the registration process as part of the retention program has not apparently reduced this as a perceived problem area.

Current Plans of FCC Former Students. Slightly more than half of the respondents planned to either reenroll at FCC or enroll at another college. Of those not planning to return to school in the near future, almost two-thirds were working, 9 percent were looking for a job, and 21 percent were caring for home and family. A somewhat higher percentage reported plans to return to FCC than was the case last year—an encouraging sign.

Implications. Attrition remains a serious problem at FCC, but there is some evidence that the Retention Program is beginning to have a positive impact. The registration process remains an area where considerable improvement could be made. Financing is also an increasing problem—one we ought to be able to address more effectively. Finally, while retention should remain a priority at FCC, we should recognize that many students who leave do so for positive reasons. Many of those who leave should be counted among our successes.

SAMPLE 3

A Memo on a Particular Problem Area

Often the results of SOIS surveys are most appropriately used on an ongoing basis and communicated in terms of particular problem areas. This example shows how data from a previously administered Entering-Student Questionnaire was used to address a particular problem—how to effectively communicate information about the College to prospective students. Note that the major table included in the memo is designed to efficiently present on a single piece of paper many of the most important pieces of information related to the communication process. Carefully designing such tables rather than simply copying a large number of cross-tabs directly from computer output will considerably enhance the usefulness of the information. (Note that this memo is based upon the same survey as Sample 1.)

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 “underrepresented” groups.

At the last Trustees' meeting, Professor Walter presented information from the Entering-Student Questionnaire we administered through the NCHEMS-College Board Student-Outcomes Information Services (SOIS). His report provided some information about how the total group of respondents viewed the different information-dissemination 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 that 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 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 redirect our efforts in this regard. Radio or TV seems to be a more efficient way of reaching students, regardless of racial/ethnic group,

TABLE 1

SOURCES OF INFORMATION USED BY ENTERING STUDENTS:
TOTAL POPULATION AND DIFFERENT TARGET GROUPS

SOURCE OF INFORMATION	TOTAL GROUP	RACIAL/ETHNIC		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	6.9	8.4	4.0	2.3	5.2

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 friends than do younger students. That perhaps is contrary to what might be expected. Even more contrary to expectations 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, 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 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 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 the differences shown on table 1. Students at the Center campus were considerably more

TABLE 2

**Sources of Information Used by Entering Students:
Different Campuses**

SOURCE OF INFORMATION	NORTH CAMPUS	SOUTH CAMPUS	CENTER CAMPUS
People in the high school	45.5%	53.0%	65.1%
Friends or acquaintances	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	15.1
Displays	8.9	8.7	8.5
College representative	5.4	4.2	6.8

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 less likely to rely on the community educational-information center than were those at Center. This may indicate a problem with the center branch in that community.

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.

These 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 reemphasize 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 Entering-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 Documentation of Survey Findings

While the intent of the first three samples is to communicate survey results to particular audiences on particular problems, the intent of this sample is to completely document the results of a survey in a concise fashion. While such a report should not always be widely distributed, it should be prepared as a ready reference or as a follow-up to be provided to those expressing a desire for further information.

Again, note that tables are carefully designed to be easy to read and to communicate a maximum of information. Where appropriate, graphic presentation has been used to enhance communication of the results. Also the specific number of respondents to each item (N) as well as percentages has been included in many tables, although this level of detail should not normally be transmitted to decision-makers. Although this report summarizes the results of a first-year data-gathering effort, the tables could easily be modified to report comparative results from several years of surveys.

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The Fairview Community College Attrition Study, 1977¹

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 that study.

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 questionnaires was 825, for an adjusted response rate of 38.3 percent.

1. This sample report is based on the results of an attrition study conducted by NCHEMS at one of four pilot-test schools that 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 materials 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 survey 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-Outcomes 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 1976/1977 (excluding those 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

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	100.0	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.²

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 questionnaires. 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 questionnaires, 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

2. The adjustment was calculated by first subtracting the 261 undeliverable questionnaires from the base sample of 2,560, resulting in a new base sample of 2,299 students. Then, since 56 of the 881 returned questionnaires (6.4 percent) were unusable, the assumption is made that 6.4 percent of all 2,299 questionnaires probably would have been unusable or 147 students. These 147 students were therefore subtracted from the base of 2,299 resulting in the adjusted base of 2,152 students. The 825 returned, usable questionnaires divided by the adjusted base of 2,152 questionnaires yielded an adjusted response 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 = 65), 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 questionnaire included:

- Gender
- Racial/ethnic
- Age
- Marital status
- Handicap status
- Length of time at college
- Highest degree held³
- Degree goal
- Enrollment status while attending
- Employment status while attending
- Number or changes of major³
- Major or area of study
- Grade-point average
- Applied for financial assistance
- State residence³

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.

3. Highest degree held, number of changes of major, and state residence were locally developed items that were added to the SOIS Former-Student Questionnaire.

- 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 seeking neither a certificate nor 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 were 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 (36 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 seek-

ing 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 those not seeking degrees were residents of Colorado (96 percent) than were those in 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 noncertificate/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 these 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. According to their responses, this group was especially interested in (1) increasing their knowledge and understanding in an academic field; (2) obtaining a

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

Reasons for Leaving. Item 16 of the Former-Student Questionnaire provided data 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 five most important reasons for students' leaving (the five reasons with the highest frequencies and percentages) for the total sample and for each subgroup.

While no single pattern emerges from table 9 across all three subgroups or across 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 asked 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 satisfied 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 identifies 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, it 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 an 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 percent 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

	CERTIFICATE		ASSOCIATE DEGREE		NEITHER		TOTAL*	
	N	%	N	%	N	%	N	%
Gender								
0 Female	39	59.1	95	57.6	381	66.8	515	64.3
1 Male	27	40.9	70	42.4	189	33.2	286	35.7
Total	66	100.0	165	100.0	570	100.0	801	100.0
No Response	0	0.0	0	0.0	4	0.7	4	0.5
Racial/Ethnic Category								
0 American Indian	0	0.0	3	2.0	7	1.3	10	1.3
1 Asian	0	0.0	1	0.6	4	0.7	5	0.7
2 Black	1	1.6	0	0.0	3	0.6	4	0.5
3 Hispanic	3	4.9	9	5.9	8	1.5	20	2.7
4 White	57	93.4	140	91.5	519	96.0	716	94.8
Total	61	100.0	153	100.0	541	100.0	755	100.0
No Response	5	7.6	12	7.3	33	5.7	50	6.2
Age								
0 Under 18	1	1.6	0	0.0	9	1.7	10	1.3
1 18-22	20	31.7	60	39.2	130	24.3	210	28.0
2 23-25	9	14.3	40	26.1	89	16.6	138	18.4
3 26-30	11	17.5	19	12.4	86	16.1	116	15.5
4 31-40	11	17.5	17	11.1	115	21.5	143	19.0
5 41-50	9	14.3	14	9.2	59	11.0	82	11.0
6 51-60	2	3.2	3	2.0	41	7.7	46	6.1
7 61 or over	0	0.0	0	0.0	6	1.1	6	0.8
Total	63	100.0	153	100.0	535	100.0	751	100.0
No Response	3	4.5	12	7.3	39	6.8	54	6.7

*NOTE: Total may not sum to 100.00 due to rounding error.

TABLE 2 (Continued)

	CERTIFICATE		ASSOCIATE DEGREE		NEITHER		TOTAL*	
	N	%	N	%	N	%	N	%
Marital Status								
0 Married	25	37.9	39	23.6	321	56.3	385	48.1
1 Not Married	41	62.1	126	76.4	249	43.7	416	52.0
Total	66	100.0	165	100.0	570	100.0	801	100.0
No Response	0	0.0	0	0.0	4	0.7	9	1.1
Permanent Handicap								
0 No	51	78.5	149	90.8	529	92.6	729	91.1
1 Yes, restricted mobility	8	12.3	5	3.0	11	1.9	24	3.0
2 Yes, restricted hearing	2	3.1	5	3.0	15	2.6	22	2.8
3 Yes, restricted vision	3	4.6	3	1.8	7	1.2	13	1.6
4 Yes, but I prefer not to record it	1	1.5	0	0.0	4	0.7	5	0.6
5 Yes, other	0	0.0	2	1.2	5	0.9	7	0.8
Total	65	100.0	164	100.0	571	100.0	800	100.0
No Response	1	1.5	1	0.6	3	0.5	10	1.2
Length of Service								
0 One to	19	28.8	33	20.0	218	39.4	270	34.4
1 One year	31	47.0	65	39.4	281	50.8	377	48.1
2 Two years	12	18.2	42	25.5	43	7.8	97	12.4
3 Three years	4	6.1	19	11.5	7	1.3	30	3.8
4 Four years	0	0.0	4	2.4	2	0.4	6	0.7
5 More than four years	0	0.0	2	1.2	2	0.4	4	0.5
Total	66	100.0	165	100.0	553	100.0	784	100.0
No Response	3	4.5	3	1.8	20	3.5	32	3.9

*Note: Total may not sum to 100.0 due to rounding error.

TABLE 2 (Continued)

	CERTIFICATE		ASSOCIATE DEGREE		NEITHER		TOTAL*	
	N	%	N	%	N	%	N	%
Highest Degree Held								
0 GED	3	4.5	9	5.5	29	5.2	43	5.3
1 High School Diploma	43	65.2	135	82.3	345	61.5	529	65.8
2 Associate Degree	5	7.6	11	6.7	26	4.6	45	5.6
3 Bachelor's Degree	8	12.1	3	1.8	103	18.4	115	14.3
4 Master's Degree	1	1.5	0	0.0	22	3.9	23	2.9
5 Professional Degree	2	3.0	0	0.0	14	2.5	16	2.0
6 Doctorate	0	0.0	0	0.0	0	0.0	0	0.0
7 None	4	6.1	6	3.7	22	3.9	33	4.1
Total	66	100.0	164	100.0	561	100.0	804	100.0
No Response	0	0.0	1	0.6	13	2.3	21	2.5
Degree Goal								
0 Certificate	66	100.0	0	0.0	0	0.0	66	8.2
1 Associate Degree	0	0.0	165	100.0	0	0.0	165	20.5
2 Neither	0	0.0	0	0.0	574	100.0	574	71.3
Total	66	100.0	165	100.0	574	100.0	805	100.0
No Response	0	0.0	0	0.0	0	0.0	20	2.4
Number of Changes of Major								
0 Never Declared Major	13	22.0	26	16.0	341	65.0	387	51.1
1 Never Changed	41	69.5	113	69.8	154	29.3	311	41.1
2 Once	2	3.4	18	11.1	17	3.2	38	5.0
3 Twice	2	3.4	4	2.5	9	1.7	15	2.0
4 Three or More	1	1.7	1	0.6	4	0.8	6	0.8
Total	59	100.0	162	100.0	525	100.0	757	100.0
No Response	7	10.6	3	1.8	49	8.5	68	8.2

*Note: Total may not sum to 100.0 due to rounding error.

TABLE 2 (Continued)

	CERTIFICATE		ASSOCIATE DEGREE		NEITHER		TOTAL*	
	N	%	N	%	N	%	N	%
Grade Point Average								
0 4.00 to 3.01	11	23.4	45	36.9	178	47.1	234	42.8
1 3.00 to 2.01	21	44.7	57	46.7	72	19.0	150	27.4
2 2.00 to 1.01	11	23.4	10	8.2	102	27.0	123	22.5
3 1.00 or less	4	8.5	8	6.6	12	3.2	24	4.4
4 Unknown	0	0.0	2	1.6	14	3.7	16	3.0
Total	47	100.0	122	100.0	378	100.0	547	100.0
No Response	19	28.8	43	26.1	196	34.1	258	32.1
Enrollment Status While Enrolled								
0 Full-Time Student	26	42.6	78	47.9	67	12.1	171	21.9
1 Part-Time Student	35	57.4	85	52.1	270	48.6	390	50.0
2 Not for Credit	0	0.0	0	0.0	219	37.3	219	28.1
Total	61	100.0	163	100.0	556	100.0	780	100.0
No Response	5	7.6	2	1.2	18	3.1	25	3.1
Employment Status While Attending								
0 Not Employed	8	13.1	33	20.1	127	22.7	170	21.3
1 1-10 Hours/Week	6	9.8	7	4.3	19	3.4	32	4.0
2 11-20 Hours/Week	5	8.2	17	10.4	42	7.5	67	8.4
3 21-35 Hours/Week	5	8.2	29	17.7	58	10.4	94	11.8
4 36 or More Hours/Week	37	60.7	78	47.6	313	56.0	434	54.5
Total	61	100.0	164	100.0	559	100.0	797	100.0
No Response	5	7.6	1	0.6	15	2.6	28	3.4

*NOTE: Total may not sum to 100.0 due to rounding error.

TABLE 2 (Continued)

	CERTIFICATE		ASSOCIATE DEGREE		NEITHER		TOTAL*	
	N	%	N	%	N	%	N	%
Applied for Financial Assistance								
0 Yes, and I received it	10	16.6	23	14.0	35	6.1	68	8.5
1 Yes, but I did not receive it	7	11.6	15	9.2	40	7.0	62	7.8
2 Yes, but I left before I found out if I received it	3	5.0	5	3.1	21	3.7	29	3.6
3 No	40	66.6	121	73.8	477	83.3	638	80.1
Total	60	100.0	164	100.0	573	100.0	797	100.0
No Response	6	9.1	1	0.6	11	1.9	18	2.2
Resident State								
0 Colorado	56	86.2	151	91.5	546	95.5	753	93.9
1 Other than Colorado	9	13.8	14	8.5	26	4.5	49	6.1
Total	65	100.0	165	100.0	572	100.0	802	100.0
No Response	1	1.5	0	0.0	2	0.3	8	1.0

*Note: Total may not sum to 100.0 due to rounding error.

TABLE 3

MAJOR OR AREA OF STUDY OF RESPONDENTS FOR TOTAL SAMPLE AND SEPARATELY FOR DEGREE CATEGORIES

MAJOR OR AREA OF STUDY	CERTIFICATE		ASSOCIATE DEGREE		NEITHER		TOTAL	
	N	%	N	%	N	%	N	%
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
Area Studies (includes Asian Studies, Black Studies)	0	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	0.0	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	0.0	1	0.6	0	0.0	1	0.2

TABLE 3 (Continued)

MAJOR OR AREA OF STUDY	CERTIFICATE		ASSOCIATE DEGREE		NEITHER		TOTAL	
	N	%	N	%	N	%	N	%
Letters (includes Creative Writing, Literature, Philosophy, Speech)	1	1.6	1	0.6	10	3.1	12	2.0
Library Science	0	0.0	0	0.0	0	0.0	0	0.0
Mathematics	0	0.0	2	1.2	3	0.9	5	0.9
Military Sciences	0	0.0	0	0.0	0	0.0	0	0.0
Physical Sciences (includes Chemistry, Physics, Earth Sciences)	0	0.0	1	0.0	5	1.5	6	1.1
Psychology	1	1.6	4	2.3	13	4.0	18	3.3
Public Affairs and Social Services	0	0.0	0	0.0	2	0.6	2	0.4
Social Sciences (includes Anthropology, Economics, History, Political Science, Sociology)	6	9.5	8	5.0	13	4.0	27	4.9
Theology and Religion	0	0.0	0	0.0	3	0.9	3	0.5
Interdisciplinary Studies	0	0.0	0	0.0	0	0.0	0	0.0
Other	0	0.0	4	2.3	4	1.2	8	1.5
Undecided but probably program of four or more years	0	0.0	0	0.0	4	1.2	4	0.7

TABLE 3 (Continued)

MAJOR OR AREA OF STUDY	CERTIFICATE		ASSOCIATE DEGREE		NEITHER		TOTAL	
	N	%	N	%	N	%	N	%
Business and Commerce Technologies (includes Accounting, Banking, 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	0.0	0	0.0
Data Processing Technologies (includes Computer Programming, Keypunching)	4	6.3	12	7.5	5	1.5	21	3.8
Health Services and Paramedical Technologies (includes Dental and Medical Assistant Technology, LPN, Occupational 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

TABLE 3 (Continued)

MAJOR OR AREA OF STUDY	CERTIFICATE		ASSOCIATE DEGREE		NEITHER		TOTAL	
	N	%	N	%	N	%	N	%
Construction and Building Technologies (includes Carpentry, Plumbing, Sheet Metal, Heating)	0	0.0	0	0.0	2	0.6	2	0.4
Natural Science Technologies (includes Agriculture Technology, Environmental Health Technology, Forestry and Wildlife Technology)	0	0.0	1	0.6	0	0.0	1	0.2
Food Services Technology (includes Food Service Supervisor, Institutional Food Preparation)	0	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)	3	4.8	17	10.6	12	3.7	32	5.8
Recreation and Social Work Related Technologies	0	0.0	1	0.6	3	0.9	4	0.7
Other	0	0.0	4	2.3	5	1.5	9	1.6
Undecided but probably less than a four-year program	10	15.9	19	11.8	52	15.9	81	14.7

TABLE 4

GOALS ASPIRED TO AND GOALS ACHIEVED OR BEING ACHIEVED
BY ALL RESPONDENTS

	Goals that were important		Goals Achieved or being achieved	
	N	%	N	%
<u>Academic Goals</u>				
A To increase my knowledge and understanding in an academic field	687	83.3	452	54.8
B To obtain a certificate or degree	226	27.4	76	9.2
C 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
<u>Career-Preparation Goals</u>				
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	197	23.9	104	12.6
I Other	65	7.9	34	4.1
<u>Career-Improvement Goals</u>				
J To improve my knowledge, 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
L Other	74	9.0	36	4.4
<u>Social- and Cultural-Participation Goals</u>				
M To become actively involved in student life and campus activities	162	19.6	118	14.3
N To increase my participation in cultural and social events	121	14.7	72	8.7
O To meet people	112	13.6	95	11.5
P Other	12	1.5	9	1.1
<u>Personal-Development and Enrichment Goals</u>				
Q To increase my self-confidence	83	10.1	44	5.3
R To improve my leadership skills	87	10.6	39	4.7
S To improve my ability to get along with others	48	5.8	31	3.8
T To learn skills that will enrich my daily life or make me a more complete person	252	30.6	190	23.0
U To develop my ability to be independent, self-reliant, and adaptable	121	14.7	53	6.4
V Other	73	8.8	48	5.8

N = 825

TABLE 5

GOALS ASPIRED TO AND GOALS ACHIEVED OR BEING ACHIEVED
BY RESPONDENTS WHO WERE SEEKING A CERTIFICATE

	Goals that were important		Goals achieved or being achieved	
	N	%	N	%
<u>Academic Goals</u>				
A To increase my knowledge and understanding in an academic field	57	86.4	25	37.9
B To obtain a certificate or degree	64	97.0	31	47.0
C To complete courses necessary to transfer to another educational institution	13	19.7	8	12.1
D To complete high-school requirements	3	4.6	2	3.0
E Other	11	16.7	3	4.6
<u>Career-Preparation Goals</u>				
F To discover career interests	15	22.7	4	6.1
G To formulate long-term career plans and/or goals	18	27.3	6	9.1
H To prepare for a new career	21	31.8	9	13.6
I Other	8	12.1	3	4.6
<u>Career-Improvement Goals</u>				
J To improve my knowledge, technical skills; and/or competencies for my job or career	64	97.0	45	68.2
K To increase my chances for a raise and/or promotion	42	63.6	24	36.4
L Other	13	19.7	4	6.1
<u>Social- and Cultural-Participation Goals</u>				
M To become actively involved in student life and campus activities	4	6.1	3	4.6
N To increase my participation in cultural and social events	2	3.0	2	3.0
O To meet people	3	4.6	3	4.6
P Other	0	0.0	0	0.0
<u>Personal-Development and Enrichment Goals</u>				
Q To increase my self-confidence	9	13.6	5	7.6
R To improve my leadership skills	16	24.2	8	12.1
S To improve my ability to get along with others	5	7.6	3	4.6
T To learn skills that will enrich my daily life or make me a more complete person	5	7.6	2	3.0
U To develop my ability to be independent; self-reliant, and adaptable	2	3.0	2	3.0
V Other	7	10.6	0	0.0

N = 66.

TABLE 6

GOALS ASPIRED TO AND GOALS ACHIEVED OR BEING ACHIEVED
BY RESPONDENTS WHO WERE SEEKING AN ASSOCIATE DEGREE

	Goals that were important		Goals achieved or being achieved	
	N	%	N	%
Academic Goals				
A To increase my knowledge and understanding in an academic field	162	98.2	125	75.8
B To obtain a certificate or degree	159	96.4	45	27.3
C To complete courses necessary to transfer to another educational institution	72	43.6	48	29.1
D To complete high-school requirements	0	0.0	0	0.0
E Other	14	8.5	8	4.9
Career-Preparation Goals				
F 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	32	19.4	13	7.9
Career-Improvement Goals				
J To improve my knowledge, technical skills, and/or competencies for my job or career	62	37.6	38	23.0
K To increase my chances for a raise and/or promotion	17	10.4	18	11.0
L Other	14	8.5	3	1.8
Social 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
O To meet people	18	11.0	17	10.3
P Other	1	0.6	0	0.0
Personal-Development and Enrichment Goals				
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
T To learn skills that will enrich my daily life or make me a more complete person	22	13.3	8	4.9
U To develop my ability to be independent, self-reliant, and capable	21	12.7	10	6.1
V Other	15	9.1	10	6.1

N = 165

TABLE 7

GOALS ASPIRED TO AND GOALS ACHIEVED OR BEING ACHIEVED
BY RESPONDENTS WHO WERE SEEKING NEITHER A CERTIFICATE NOR AN ASSOCIATE DEGREE

	Goals that were important		Goals achieved or being achieved	
	N	%	N	%
<u>Academic Goals</u>				
A To increase my knowledge and understanding in an academic field	468	78.8	302	50.8
B To obtain a certificate or degree	3	0.5	0	0.0
C To complete courses necessary to transfer to another educational institution	109	18.1	92	15.5
D To complete high-school requirements	0	0.0	0	0.0
E Other	82	13.8	75	12.6
<u>Career-Preparation Goals</u>				
F To discover career interests	201	33.8	171	28.8
G To formulate long-term career plans and/or goals	225	37.9	202	34.0
H To prepare for a new career	75	12.6	20	3.4
I Other	25	4.2	18	3.0
<u>Career-Improvement Goals</u>				
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 promotion	140	23.6	82	13.8
L Other	47	8.0	29	4.9
<u>Social- and Cultural-Participation Goals</u>				
M To become actively involved in student life and campus activities	119	20.0	95	16.0
N To increase my participation in cultural and social events	101	17.0	59	10.0
O To meet people	91	15.3	75	12.6
P Other	11	1.9	9	1.5
<u>Personal-Development and Enrichment Goals</u>				
Q To increase my self-confidence	32	5.4	21	3.5
R To improve my leadership skills	48	8.1	22	3.7
S To improve my ability to get along with others	25	4.2	17	2.9
T To learn skills that will enrich my daily life or make me a more complete person	225	37.9	180	30.3
U To develop my ability to be independent, self-reliant, and adaptable	98	16.5	41	7.0
V Other	51	8.6	38	6.4

N = 594

TABLE 8

 RESPONDENTS' REASONS FOR LEAVING
 FOR TOTAL SAMPLE AND SUBGROUPS

	CERTIFICATE		ASSOCIATE DEGREE		NEITHER		TOTAL	
	N	%	N	%	N	%	N	%
<u>Academic Reasons</u>								
A	21	31.8	39	23.6	266	44.8	326	39.5
B	9	13.6	41	24.8	109	18.3	159	19.3
C	8	12.1	20	12.1	21	3.5	49	5.9
D	5	7.6	14	8.5	101	17.0	120	14.5
E	5	7.6	25	15.1	111	18.7	141	17.1
F	11	16.7	31	18.8	99	16.7	141	17.1
G	10	15.2	35	21.2	135	22.7	180	21.8
H	13	19.7	42	25.4	77	13.0	132	16.0
I	11	16.7	25	15.1	109	18.3	145	17.6
<u>Financial Reasons</u>								
J	22	33.8	65	39.7	169	28.5	256	31.0
K	18	27.3	59	35.9	131	22.0	208	25.2

TABLE 8 (Continued)

	CERTIFICATE		ASSOCIATE DEGREE		NEITHER		TOTAL	
	N	%	N	%	N	%	N	%
<u>Other Reasons</u>								
L Achieved my personal goals	9	13.6	27	16.4	185	31.1	221	26.8
M Accepted a job or entered the military	5	7.6	14	8.5	101	17.0	120	14.5
N College experience not what I expected	4	6.1	12	7.3	38	6.4	54	6.5
O Few people I could identify with	5	7.6	14	8.5	31	5.2	50	6.1
P Moved out of the area	9	13.6	16	9.7	59	9.9	84	10.2
Q Could not work and go to school at the same time	32	48.7	93	56.4	251	42.2	376	45.6
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	10.9	85	10.3

N = 66

N = 165

N = 594

N = 825

TABLE 9

THE FIVE MOST IMPORTANT REASONS FOR LEAVING
FOR TOTAL SAMPLE AND SUBGROUPS

REASONS FOR LEAVING	CERTIFICATE			ASSOCIATE DEGREE			NEITHER			TOTAL		
	R	N	%	R	N	%	R	N	%	R	N	%
Could not work and go to school at the same time	1	32	48.5	1	93	56.3	2	251	42.3	1	376	45.6
Achieved my academic goals	4	21	31.8	-	39	23.6	1	266	44.8	2	326	39.5
Did not have enough money to continue	2	22	33.3	3	65	39.4	4	169	28.5	3	256	31.0
Achieved my personal goals	-	9	13.6	2	27	16.4	3	185	31.1	4	221	26.8
Other responsibilities became too great	3	21	31.8	4-5	59	35.8	-	129	21.7	5	209	25.3
Could not earn enough money to continue	5	18	27.3	4-5	59	35.8	-	131	22.1	-	208	25.2
Dissatisfied with learning environment	-	10	15.2	-	35	21.2	5	135	22.7	-	180	21.8

N = 66

N = 165





N = 594

N = 825

TABLE 10

RESPONDENTS' AWARENESS, USE, AND SATISFACTION WITH COLLEGE SERVICES

Legend

-  Did not know about service
-  Knew about service but did not use it
-  Used service and was satisfied
-  Used service but was not satisfied

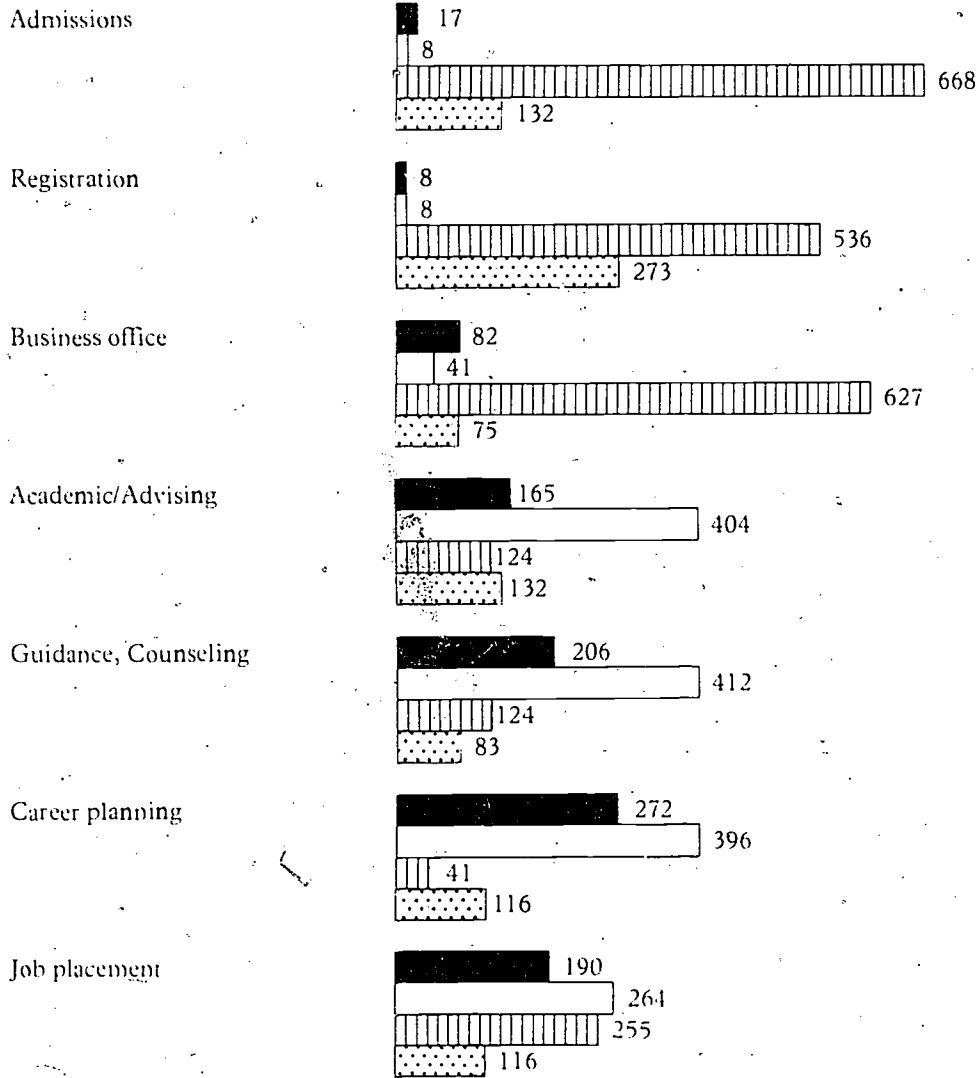
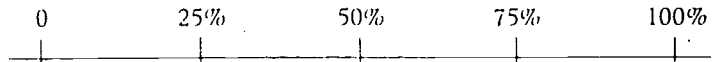




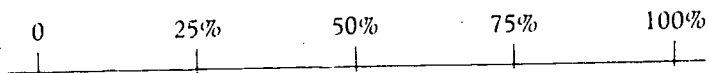


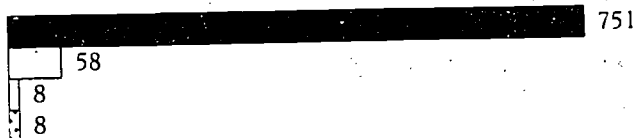
TABLE 10 (Continued)

Legend

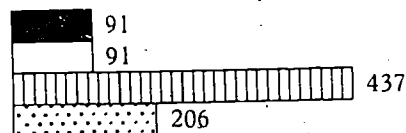
-  Did not know about service
-  Knew about service but did not use it
-  Used service and was satisfied
-  Used service but was not satisfied



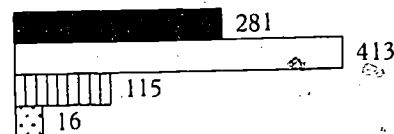
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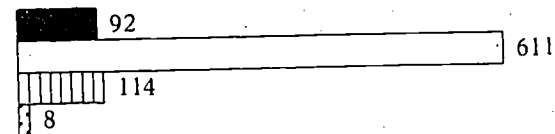
Cafeteria



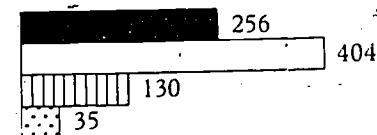
Health services



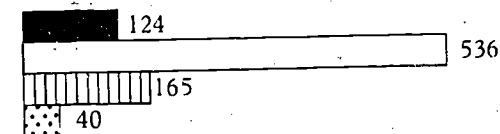
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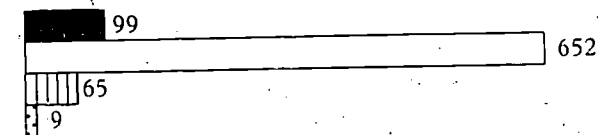
Minority affairs



College cultural programs



Recreation and athletic programs



Financial aid

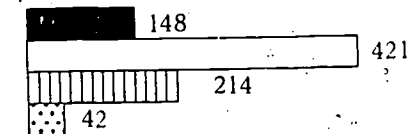




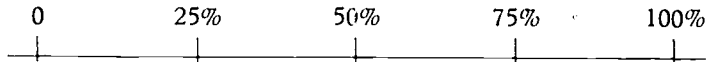


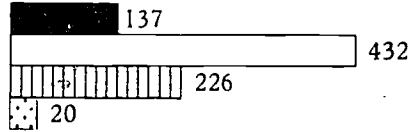
TABLE 10 (Continued)

Legend

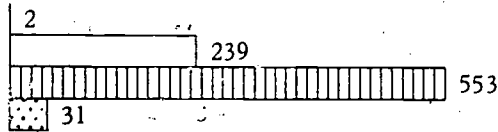
-  Did not know about service
-  Knew about service but did not use it
-  Used service and was satisfied
-  Used service but was not satisfied



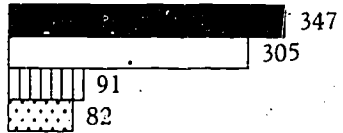
Student employment



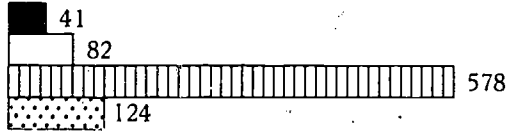
Library



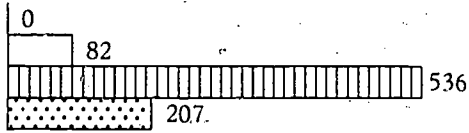
Child care



Bookstore



Parking



Campus security

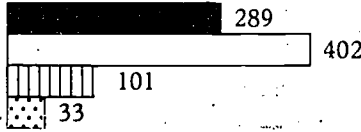


TABLE 11
THE FIVE MOST AND LEAST RECOGNIZED SERVICES

SERVICES	RANK	N	%
<u>Most Recognized</u>			
Parking	1	825	100.0
Registration	2	817	99.0
Admissions	3	808	97.9
Bookstore	4	784	95.0
Business Office	5	743	90.1
			N = 825
<u>Least Recognized</u>			
Housing Services	1	751	91.0
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 AND LEAST SATISFACTORY SERVICES
BASED ON THE PROPORTION USING WHO WERE SATISFIED

SERVICES	RANK	N SATISFIED	N USING	%
<u>Most Satisfactory</u>				
Library	1	553	584	94.7
Tutoring	2	114	122	93.4
Student Employment	3	226	246	91.9
Business Office	4	627	702	89.3
Health Services	5	115	131	87.8
Recreation & Athletic Programs	5	65	74	87.8
<u>Least Satisfactory</u>				
Career Planning	1	41	157	26.1
Academic Advising	2	124	255	48.4
Housing Services	3	8	16	50.0
Child Care	4	91	173	52.6
Guidance and Counseling	5	124	207	59.9

TABLE 13.

RESPONDENTS' FUTURE EDUCATIONAL PLANS

Plans for Additional Education	CERTIFICATE		ASSOCIATE DEGREE		NEITHER		TOTAL	
	N	%	N	%	N	%	N	%
No, not at this time	40	60.6	62	38.3	322	58.1	424	54.2
Yes, I plan to reenroll at this college	15	22.7	31	19.1	58	10.5	104	13.3
Yes, I plan to enroll at another college	3	4.5	34	21.0	61	11.0	98	12.5
Yes, I have already enrolled at another college	5	7.6	30	18.5	56	10.1	91	11.6
I am currently undecided	3	4.5	5	3.1	57	10.3	65	8.3
Total	66	100.0	162	100.0	554	100.0	782	100.0
No Response	0	0.0	3	1.8	20	3.5	23	28.6

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 questionnaire. 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 certificate 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 entirely 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 were enrolled for one term before leaving. Slightly over 40 percent of both groups were full-time students. Only 13 percent of the certificate 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 College 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 this 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 frequently 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 seekers had no current plans for additional education. Of the remainder, 19 percent planned to reenroll at FCC, 21 percent planned to enroll at another college, and 18 percent had already enrolled at another college.

EXAMPLE OF INITIAL COVER LETTER

FAIRVIEW COMMUNITY COLLEGE

July 25, 1977

Dear Former Student:

Our institutional records indicate that you have not returned to Fairview Community College. The College is interested in determining the reasons why you left FCC and your degree of satisfaction with various aspects of the College. This information will be particularly helpful in our institutional planning as we continue to meet the needs of the students.

To help us determine this we have enclosed a confidential questionnaire for you to complete. Please complete the questionnaire as soon as possible and return it in the enclosed envelope. You may notice that this questionnaire includes personal data about yourself. This is included in order to verify our institutional records and for statistical purposes. This information will remain confidential and your responses will become part of our statistical report.

If you have reenrolled at FCC, the receipt of this questionnaire in no way affects that reenrollment. You were merely selected to receive this questionnaire because you were not continuously enrolled at FCC during one of the preceding years.

Your cooperation and assistance in completing this questionnaire as soon as possible is greatly appreciated. Thank you.

Sincerely,

Richard A. Nelson

Richard A. Nelson
President

HMS/c

218

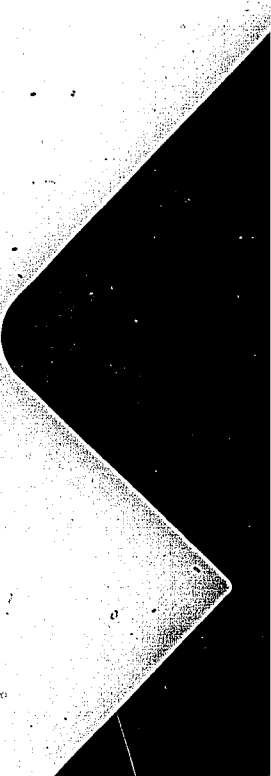
214

APPENDIX

Sample of Questionnaire
Used in Study

219

215



PERSONAL IDENTIFICATION

Do not complete this section

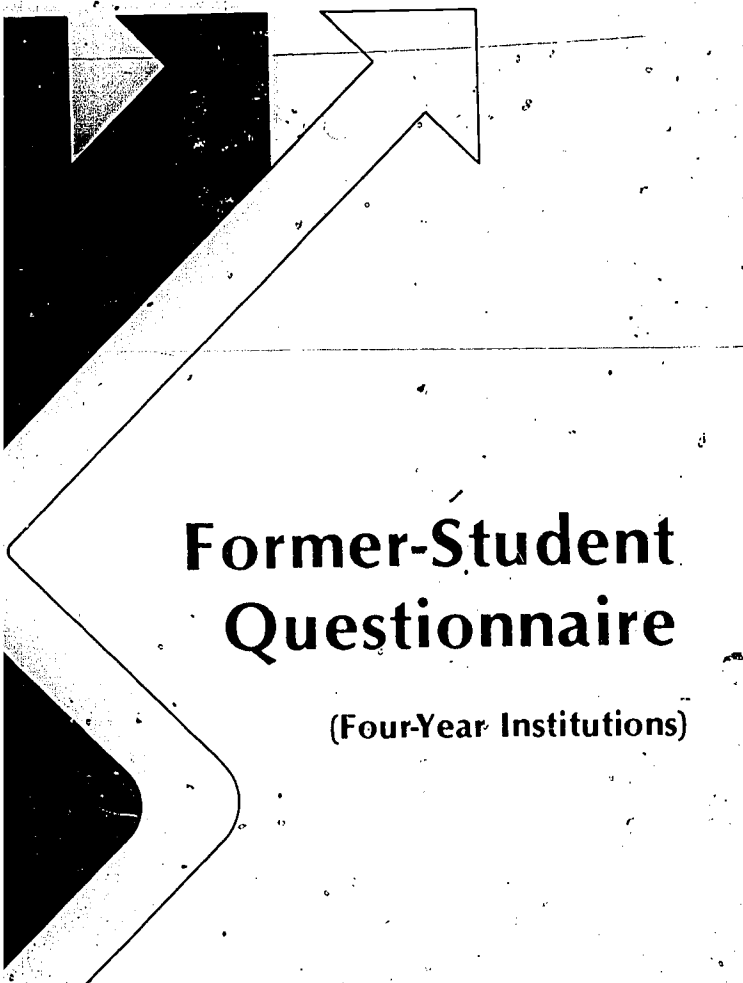
LAST NAME

ANY OTHER NAME WHICH:

STUDENT IDENTIFICATION:

PERMANENT MAILING ADDRESS NUMBER AND STREET:

CITY



Former-Student Questionnaire

(Four-Year Institutions)

IDENTIFICATION

to do so. Please print.

<input type="text"/>	FIRST NAME	<input type="text"/>	MIDDLE INITIAL	<input type="text"/>
1-12		13-20		21
UNIVERSITY OR COLLEGE RECORDS _____				
<input type="text"/>	TELEPHONE NUMBER _____			
22-30				
<input type="text"/>				
31-55				
<input type="text"/>	STATE	<input type="text"/>	ZIP CODE	<input type="text"/>
56-70		71-72		73-77

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 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?

0 Yes

1 No

If you are not currently married, you would circle the number 1.

1. What is your sex?

0 Female

1 Male

2. How do you describe yourself? Circle one.

0 American Indian or Alaskan Native

1 Asian, Pacific Islander, or Filipino

2 Black or Afro-American

3 Hispanic, Chicano, or Spanish-speaking American

4 White or Caucasian

5 Other _____

3. How old are you?

0 Under 18

1 18 to 22 years

2 23 to 25 years

3 26 to 30 years

4 31 to 40 years

5 41 to 50 years

6 51 to 60 years

7 61 years or more

4. Are you currently married?

0 Yes

1 No

5. Do you feel that you have a permanent handicap?

Circle all that apply.

82 0 No

83 1 Yes, restricted mobility

84 2 Yes, restricted hearing

85 3 Yes, restricted vision

86 4 Yes, but I prefer not to record it on this form

87 5 Other _____

6. How long did you attend our college?

0 One term

1 One year

2 Two years

3 Three years

4 Four years

5 Five years

6 Six years

7 More than six 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 important to you when you attended our college. In the second column, circle the letters of those goals you feel you are achieving or have achieved as a result of your experiences at our college.

These goals were important to me

These goals I am achieving or have achieved

- | | | <u>Academic Goals</u> | |
|--|---|-----------------------|--|
| 89 | A | 90 | A To increase my knowledge and understanding in an academic field |
| 91 | B | 92 | B To obtain a certificate or degree |
| 93 | C | 94 | C To complete courses necessary to transfer to another educational institution |
| 95 | D | 96 | D Other _____ |
| <u>Career-Preparation Goals</u> | | | |
| 97 | E | 98 | E To discover career interests |
| 99 | F | 100 | F To formulate long-term career plans and/or goals |
| 101 | G | 102 | G To prepare for a new career |
| 103 | H | 104 | H Other _____ |
| <u>Job- or Career-Improvement Goals</u> | | | |
| 105 | I | 106 | I To improve my knowledge, technical skills, and/or competencies in my job or career |
| 107 | J | 108 | J To increase my chances for a raise and/or promotion |
| 109 | K | 110 | K Other _____ |
| <u>Social- and Cultural-Participation Goals</u> | | | |
| 111 | L | 112 | L To become actively involved in student life and campus activities |
| 113 | M | 114 | M To increase my participation in cultural and social events |
| 115 | N | 116 | N To meet people |
| 117 | O | 118 | O Other _____ |
| <u>Personal-Development and Enrichment Goals</u> | | | |
| 119 | P | 120 | P To increase my self-confidence |
| 121 | Q | 122 | Q To improve my leadership skills |
| 123 | R | 124 | R To improve my ability to get along with others |
| 125 | S | 126 | S To learn skills that will enrich my daily life or make me a more complete person |
| 127 | T | 128 | T To develop my ability to be independent, self-reliant, and adaptable |
| 129 | U | 130 | U Other _____ |

8. From the list of goals in question 7, please 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 Important 131 Second Most Important 132 Third Most Important 133

9. What degree were you seeking when you attended our college?

- 111
- 0 Not seeking a certificate or degree
 - 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., medicine, law, theology)
 - 7 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)

10. a. Please write in your major or area of study at our college.

b. Now look at **List A: Majors and Areas of Study** and enter in the boxes below the code number of the category in which your major or area of study falls.

135-138

11. a. Was our college your first choice?

- 139
- 0 Yes
 - 1 No

b. If no, what kind of college was your first choice?

- 140
- 0 A public two-year college
 - 1 A public four-year college or university
 - 2 A private college or university
 - 3 A vocational/technical school, hospital school of nursing, trade school, or business school
 - 4 Other _____

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

12. When you left our college, what was your overall grade-point average (GPA)?

- 141
- 0 4.00 to 3.01
 - 1 3.00 to 2.01
 - 2 2.00 to 1.01
 - 3 1.00 or less
 - 4 Unknown or did not have one

13. What was your primary enrollment status when you attended our college?

- 142
- 0 Primarily for credit — full-time (12 or more hours each term enrolled)
 - 1 Primarily for credit — part-time (less than 12 hours each term enrolled)
 - 2 Primarily not for credit

14. While you were enrolled, how many hours did you normally work when classes were being held?

- 143
- 0 I was not employed
 - 1 Employed 1-10 hours per week
 - 2 Employed 11-20 hours per week
 - 3 Employed 21-35 hours per week
 - 4 Employed 36 hours or more per week

15. Did you apply for financial assistance (loan or scholarship) while at our college?

- 144
- 0 Yes, and I received it
 - 1 Yes, but I did not receive it
 - 2 Yes, but I left before I found out I received it
 - 3 No

16. The decision to leave a particular college can be motivated by a variety of reasons. Please circle the letters of all of the reasons that contributed to your decision to leave our college.

Academic Reasons

- 145 A Achieved my academic goals
- 146 B Transferred to another college
- 147 C Needed a break from college
- 148 D Courses/programs I wanted were not available
- 149 E Dissatisfied with my academic performance
- 150 F Dissatisfied with the quality of teaching
- 151 G Dissatisfied with the learning environment
- 152 H Course work not what I wanted
- 153 I Unsure of my academic goals
- 154 J Other _____

Financial Reasons

- 155 K Did not have enough money to continue
- 156 L Could not obtain sufficient financial aid
- 157 M Could not earn enough money while enrolled
- 158 N Other _____

Other Reasons

- 159 O Achieved my personal goals
- 160 P Accepted a job or entered the military
- 161 Q College experience not what I expected
- 162 R Few people I could identify with
- 163 S Moved out of the area
- 164 T Could not work and go to school at the same time
- 165 U Other responsibilities became too great
- 166 V Personal problems
- 167 W Other _____

17. From the list of reasons in question 16, please select the three most important reasons and enter their codes below. For example, if the most important reason was that you "Transferred to another college," enter the letter B in the first box.

Most Important 168 Second Most Important 169 Third Most Important 170

18. The following are services provided by colleges. How would you evaluate these services, as provided by our college? For each service, circle the number of the response that is most appropriate.

	↓	↓	↓	↓	
	I did not know about this service	I knew about this service but did not use it	I used this service and was satisfied with it	I used this service but was not satisfied with it	
171	0	1	2	3	Admissions
172	0	1	2	3	Registration
173	0	1	2	3	Business office
174	0	1	2	3	Academic advising
175	0	1	2	3	Guidance, counseling, and testing
176	0	1	2	3	Reading, writing, math, and study skills improvement
177	0	1	2	3	Tutoring
178	0	1	2	3	Minority affairs
179	0	1	2	3	College cultural programs
180	0	1	2	3	Recreation and athletic programs
181	0	1	2	3	Financial aid
182	0	1	2	3	Student employment
183	0	1	2	3	Career planning
184	0	1	2	3	Job placement
185	0	1	2	3	Housing services
186	0	1	2	3	Cafeteria
187	0	1	2	3	Health services
188	0	1	2	3	Library
189	0	1	2	3	Child care
190	0	1	2	3	Bookstore
191	0	1	2	3	Parking
192	0	1	2	3	Campus security
193	0	1	2	3	Other _____

19. 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
- 4 I am 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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	21	22	23	24
195	196	197	198	199
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	26	27	28	29
200	201	202	203	204
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	31	32	33	34
205	206	207	208	209

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

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	Communications
0700	Computer and Information Sciences
0800	Education
0900	Engineering
1000	Fine and Applied Arts (includes Art, Dance, Drama, Music, etc.)
1100	Foreign Languages
1200	Health Professions
1300	Home Economics (includes Clothing and Textiles, Institutional Housekeeping, and Food Service Management, etc.)
1400	Law
1500	Letters (includes Creative Writing, Literature, Philosophy, Speech, etc.)
1600	Library Science
1700	Mathematics
1800	Military Sciences
1900	Physical Sciences (includes Chemistry, Physics, Earth Sciences, etc.)
2000	Psychology
2100	Public Affairs and Social Services
2200	Social Sciences (includes Anthropology, Economics, History, Political Science, Sociology, etc.)
2300	Theology and Religion
4900	Interdisciplinary Studies
6000	Other
7000	Undecided but probably program of four or more years

Programs usually requiring less than four years of study

5000	Business and Commerce Technologies (includes Accounting, Banking, Commercial Art, Hotel and Restaurant Management, etc.)
5005	Secretarial Technologies (includes Office Supervising and Management, Stenographic and Typing Technology, etc.)
5006	Personal Service Technologies (includes Stewardless Training, Cosmetologist, etc.)
5100	Data Processing Technologies (includes Computer Programming, Key punching, etc.)
5200	Health Services and Paramedical Technologies (includes Dental and Medical Assistant Technology, LPN, 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 Technologies (includes Carpentry, Plumbing, Sheet Metal, Heating, etc.)
5400	Natural Science Technologies (includes Agriculture Technology, Environmental Health Technology, Forestry and Wildlife Technology, etc.)
5404	Food Services Technologies (includes Food Service Supervising, Institutional Food Preparation, etc.)
5500	Public Service Technologies (includes Law Enforcement Technology, Teacher Aide Training, Fire Control Technology, Public Administration Technology, etc.)
5506	Recreation and Social Work related Technologies
8000	Other
9000	Undecided but probably less than four year program

Additional Questions

In addition to the questions you have already answered, we would appreciate your answering a few additional questions that are important for our study.

Please record your answers to the following questions in the appropriate boxes provided in the ADDITIONAL QUESTIONS SECTION.

20. What is the highest degree you currently hold?

Circle one.

- 0 GED equivalency
- 1 High school diploma
- 2 Associate degree
- 3 Bachelor's degree
- 4 Master's degree
- 5 Professional degree (DDS, MD, DVM, JD)
- 6 Doctor's degree (PhD, EdD, DBA)
- 7 I have no degree or diploma

21. How many times did you change your major or area of study while enrolled? Circle one.

- 0 Never declared a major or area of study
- 1 Never changed major or area of study
- 2 One time
- 3 Two or more times

22. Where was your permanent residence while you were enrolled in our college?

- 0 In Colorado
- 1 In a state other than Colorado

SOIS ORDER FORM

Quantity	Unit × Cost =	Amount	QUESTIONNAIRES	2-Year Series	4-Year Series
_____	\$15/hundred or 15¢ each	_____	Entering-Student Questionnaire	<input type="checkbox"/>	<input type="checkbox"/>
_____	"	_____	Continuing-Student Questionnaire	<input type="checkbox"/>	<input type="checkbox"/>
_____	"	_____	Program-Completer and Graduating Student Questionnaire	<input type="checkbox"/>	<input type="checkbox"/>
_____	"	_____	Former-Student Questionnaire	<input type="checkbox"/>	<input type="checkbox"/>
_____	"	_____	Recent-Alumni Questionnaire	<input type="checkbox"/>	<input type="checkbox"/>
_____	"	_____	Long-Term Alumni Questionnaire	<input type="checkbox"/>	<input type="checkbox"/>
BOOKS					
_____	\$10.00	_____	<i>Student Outcomes Questionnaires: An Implementation Handbook, 2nd ed.</i>		
_____	\$ 6.00	_____	<i>A Manual for Conducting Student Attrition Studies</i>		
_____	50¢ or \$2.00	_____	Shipping and handling (50¢ per book or sample questionnaires; \$2.00 for quantity questionnaire orders)		
TOTAL					

Name _____ Title _____

Department _____ Institution _____

Address _____ City _____ State _____ Zip _____

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_____	\$15/hundred or 15¢ each	_____	Entering-Student Questionnaire	<input type="checkbox"/>	<input type="checkbox"/>
_____	"	_____	Continuing-Student Questionnaire	<input type="checkbox"/>	<input type="checkbox"/>
_____	"	_____	Program-Completer and Graduating Student Questionnaire	<input type="checkbox"/>	<input type="checkbox"/>
_____	"	_____	Former-Student Questionnaire	<input type="checkbox"/>	<input type="checkbox"/>
_____	"	_____	Recent-Alumni Questionnaire	<input type="checkbox"/>	<input type="checkbox"/>
_____	"	_____	Long-Term Alumni Questionnaire	<input type="checkbox"/>	<input type="checkbox"/>
BOOKS					
_____	\$10.00	_____	<i>Student Outcomes Questionnaires: An Implementation Handbook, 2nd ed.</i>		
_____	\$ 6.00	_____	<i>A Manual for Conducting Student Attrition Studies</i>		
_____	50¢ or \$2.00	_____	Shipping and handling (50¢ per book or sample questionnaires; \$2.00 for quantity questionnaire orders)		
TOTAL					

Name _____ Title _____

Department _____ Institution _____

Address _____ City _____ State _____ Zip _____

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