

DOCUMENT RESUME

ED 172 671

HF 011 482

AUTHOR Gray, Robert G.; And Others.
 TITLE Student Outcomes Data Collection: A Manual and Student Handbook.
 INSTITUTION College Entrance Examination Board, New York, N.Y.; National Center for Higher Educational Management Systems, Boulder, Colo.
 SPONS AGENCY West Virginia State Commission for Higher Education, Boulder, Colo.; National Center for Higher Education Management Systems.
 PUB DATE 79.
 POST 210.; Not available in paper copy. In small print.
 AVAILABLE FROM National Center for Higher Educational Management Systems, P.O. Box 211, Boulder, Colorado 80302.
 EDRS PRICE MF01 plus post. fee. Not available from EDRS.
 DESCRIPTORS Colleges; College Students; Community Colleges; Data Collection; Evaluation Methods; Higher Education; Information Sources; Institutions; Systems; Instructional Materials; Junior Colleges; Statistical Analysis; Student Characteristics; Student Outcomes; Student Outcomes Information Service.

ABSTRACT

This student outcomes questionnaire and the Student Outcomes Information Service (SOIS) developed by NCHES and the College Board are discussed. The term, "student outcomes," is defined as the concept of a student's involvement in an educational institution and involvement in his program. The importance of this type of information is discussed. General information and guidelines for using the questionnaire and the SOIS are presented. The SOIS provides services that include: (1) a plan for collecting student outcomes information and inserting it into a student outcomes information system; (2) general guidelines for conducting studies to obtain cross-sectional or longitudinal student outcomes information at the postsecondary level; (3) specific questionnaires for conducting student surveys; and (4) a question response-analysis service that provides computer printouts of analytical information. Questionnaire and service are provided for both two- and four-year institutions. Plans for developing and administering the questionnaires are provided as well as recommendations for developing a student outcomes data collection plan; using the SOIS Questionnaire Analysis Service; coding, processing, and analyzing the data; and interpreting the results. Appended are the two-year college questionnaire, the four-year colleges and universities questionnaires, samples of survey results, and questionnaire keypunching formats. (31)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *



ED172671

Student-Outcomes Questionnaires:

An Implementation Handbook

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

R. K. H. F. M. S.

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

National Center for Higher Education Management Systems
The College Board





National Center for Higher Education Management Systems
 Post Office Drawer P, Boulder, Colorado 80302
An Affirmative Action/Equal Opportunity Employer

The mission of the National Center for Higher Education Management Systems (NCHEMS) is to carry out research, development, dissemination, and evaluation activities and to serve as a national resource to assist individuals, institutions, agencies and organizations of postsecondary education, and state and federal governments in bringing about improvements in planning and management in postsecondary education.

BOARD OF DIRECTORS

Chairperson

Barbara S. Uehling
 Chancellor,
 University of Missouri-Columbia

Chairperson-Elect

Robert Lisensky
 President,
 Willamette University

William Arceneaux

Louisiana Commissioner of
 Higher Education

Raymond F. Bacchetti

Vice Provost, Budget and Planning,
 Stanford University

May Brodbeck

Vice President for Academic Affairs
 and Dean of the Faculties,
 University of Iowa

Neil S. Bucklew

Provost, Ohio University

Ray Chamberlain

President,
 Colorado State University

Henrik N. Dullen

Assistant Secretary to the Governor
 for Education and the Arts,
 State of New York

Harold L. Einarson

President, Ohio State University

Paul O. Gaddis

Senior Vice President for
 Management and Finance,
 University of Pennsylvania

Henry G. Herzing

President, Herzing Industries, Inc.
 Milwaukee, Wisconsin

T. Edward Hollander

Chancellor, New Jersey Board of
 Higher Education

Ruth A. Jass

Planning Associate to the President,
 Director of Institutional Research and
 Registrar, Bradley University

Hans H. Jenny

Vice President for
 Finance and Business,
 The College of Wooster

Joseph E. Kauffman

Professor of
 Educational Administration,
 University of Wisconsin-Madison

Virginia L. Lester

President, Mary Baldwin College

Daniel E. Marvin, Jr.

President, Eastern Illinois University

C. Gary Norris

Executive Coordinator, Washington
 Council for Postsecondary Education

Dale P. Parnell

President, San Joaquin Delta College

Frank B. Pesci, Sr.

Maryland State Delegate

James A. Robinson

President, University of West Florida

Stanley F. Salwak

President, University of Maine at
 Presque Isle

Clarence Scheps

Executive Vice President,
 Tulane University

Donald H. Smith

President,
 Brookdale Community College

Jack F. Tolbert

President, The Medix Schools

Richard L. Van Horn

Vice President for Business Affairs,
 Carnegie-Mellon University

Brunetta R. Wolfman

Executive Planner and Director of
 Policy Planning and Development,
 Massachusetts Department of
 Education

Ex Officio Members

James W. White

Chairperson, National Advisory Council
 Vice President for Administration,
 American Association of
 Community and Junior Colleges

John F. Hughes

Chairperson-Elect,
 National Advisory Council
 Director, Policy Analysis Service,
 American Council on Education

OFFICERS

Ben Lawrence
 Executive Director

Dennis P. Jones
 Associate Director

Alvin D. Orwig
 Associate Director

Gordon H. Ziemer
 Secretary/Treasurer and
 Associate Director

The work upon which this publication is based was performed by NCHEMS pursuant to Contract No. 400-77-0004—Finance and Productivity Group—with the National Institute of Education. It does not, however, necessarily reflect the views of that agency.

This publication was not printed at the expense of the federal government.

National Center for Higher Education Management Systems, Inc.
Boulder, Colorado 80302

Printed in the United States of America

Designed by Lynn E. Phillips

Contents

Figures	ix
Preface	xi
Acknowledgments	xiii
Chapter 1: Introduction	1
What Are Student Outcomes?	3
What Students and Outcomes Do the Questionnaires Study?	3
How Were the Questionnaires Developed?	5
How Can Student-Outcomes Information Be Used?	6
What Are the Future Plans for the SOIS Questionnaires?	7
Chapter 2: Developing a Student Outcomes Data-Collection Plan	9
A Plan for Collecting Student-Outcomes Data	9
Schedules and Administration Cycles	11
Chapter 3: Guidelines for Planning and Administering Questionnaire Surveys	17
Institution-wide Involvement	18
Survey-Design Considerations	18
Sampling Considerations	19

Obtaining and Adapting the SOIS Questionnaires	20
Alternatives for Administering the SOIS Questionnaires	24
Cover Letters and Memos for SOIS Questionnaires	25
Costs, Materials, and Personnel for Administering the Questionnaires	26
Tracking Mailed-Out Questionnaires	28
Follow-Up Mailing Strategies	31
Checklist of Survey-Planning and Administration Activities	33
Chapter 4: Using the SOIS Questionnaire-Analysis Service	35
How to Use the Questionnaire-Analysis Service	36
Outputs of the Analysis Service	38
Understanding the Computer Analyses	41
Chapter 5: Coding, Processing, and Analyzing the Data	49
Hand Coding and Inspecting Returned Questionnaires	49
Keypunching	49
Computer Editing	50
Matching Questionnaire Data to Master-File Data	51
Packaged Computer Programs	52
Performing Data Analyses	52
Chapter 6: Using the Survey Results	57
Identifying the Users	57
What Kinds of Reports Should Be Provided?	58
Making Decisions Based on Information	59
Feedback to Respondents	59
References	61
Appendix 1: The Two-Year Colleges Questionnaires	63
Appendix 2: The Four-Year Colleges and Universities Questionnaires	87
Appendix 3: Samples of Local Items	111
Appendix 4: Sample Reports from Student-Outcomes Assessment Surveys	119
Two Summary Reports for Governing Boards or Senior Administrators:	
Sample 1	121
Sample 2	131

Sample 3: A Report Addressed to a Particular Problem Area	137
Sample 4: Complete Documentation of Survey Findings	145
Appendix 5: Questionnaire Keypunching Formats Using 80-Column Cards	191

Figures

1. Student-Outcomes Data-Collection Points for Colleges and Universities	10
2. Schedule for Implementing Data-Collection Plan	13
3. Example Survey Administration Cycles	15
4. Example of Space Provided on the Questionnaire for Additional Local Questions	22
5. An Example of a Set of Local Questions Added to a Former-Student Questionnaire	23
6. Estimated Costs of Materials for Initial Mail or Handout Contact of 1,000 Students	27
7. Suggested Form for Listing of Sample and Survey Status	29
8. Example of Listing of Western College Sample and Survey Status	30
9. Estimated Costs of Materials for Four Types of Follow-Up Mailings to 700 Students	32
10. Questionnaire Batch Transmittal Form	39
11. Sample Table of Contents for SOIS Analysis	40
12. Sample Index for SOIS Analysis	41
13. Sample Question Table for SOIS Analysis	42
14. Sample Cross-Tabulation Report for SOIS Analysis	44
15. Sample Items in the SOIS Entering-Student Questionnaire	46

16.	Flowchart of Steps Required to Identify Status of All Students in Survey	52
17.	Sample Tabulation for a Questionnaire Item Requiring a Single Response	53
18.	Sample Tabulation for Questionnaire Item That Allows for Multiple Responses	54

Preface

The *Handbook* presents a set of general guidelines for using the Student-Outcomes Questionnaires. The guidelines were developed by the National Center for Higher Education Management Systems (NCHEMS) and the College Board to conduct student-outcomes assessment studies in two-year colleges and in four-year colleges and universities.¹ It also presents a set of procedures for using the questionnaire response-analysis service that is provided through the NCHEMS-College Board Student-Outcomes Information Services (SOIS) program. It is intended for use by researchers working in the area of student-outcomes assessment, by institutional administrators and faculty concerned with program planning and evaluation and institutional self-study, and by practitioners interested in obtaining information about student outcomes for decisionmaking purposes.

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

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

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

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

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

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

~~Acknowledgments~~

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

Two-Year College Task Force

Dr. Steve Brainard
Director of Institutional Research
and Planning
Penn Valley Campus of the Metropolitan
Community College District
Kansas City, Missouri

Dr. William J. Burns
Acting President
Cuyahoga Community College
Metropolitan Campus
Cleveland, Ohio

Mr. Robert Metzler
Director of Curriculum and
Education Services
Colorado Mountain College
Glenwood Springs, Colorado

Dr. Gary Rice
Director of Planning, Research,
and Information Systems
Yakima Valley Community College
Yakima, Washington

Four-Year College and University Task Force

Dr. John Bolte
Associate Vice President for
Academic Affairs
Florida Technological University
Orlando, Florida

Dr. Dean Hofland
Coordinator of Student Data and
Testing
South Dakota State University
Brookings, South Dakota

Mrs. Kay Dey
Director of Institutional Research
Fort Hays State College
Fort Hays, Kansas

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

Introduction

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

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

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

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

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

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

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

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

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

The subsequent sections of the *Handbook* deal with developing:

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

WHAT ARE STUDENT OUTCOMES?

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

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

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

WHAT STUDENTS AND OUTCOMES DO THE SOIS QUESTIONNAIRES STUDY?

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

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

HOW WERE THE QUESTIONNAIRES DEVELOPED?

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

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

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

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

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

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

HOW CAN STUDENT-OUTCOMES INFORMATION BE USED?

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

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

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

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

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

WHAT ARE THE FUTURE PLANS FOR THE SOIS QUESTIONNAIRES?

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

Developing a Student-Outcomes Data-Collection Plan

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

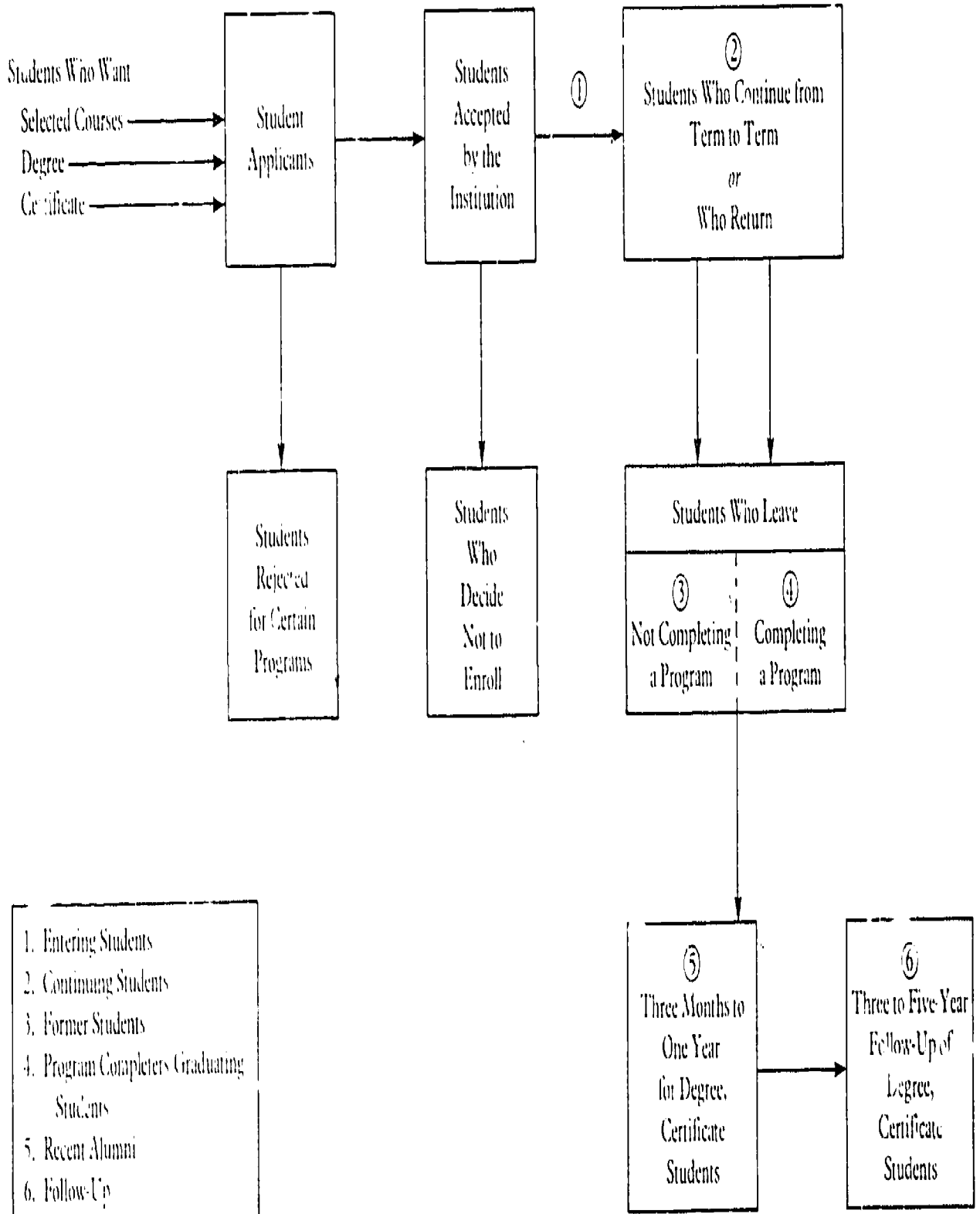
A PLAN FOR COLLECTING STUDENT-OUTCOMES DATA

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

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

FIGURE 1

STUDENT-OUTCOMES DATA-COLLECTION POINTS FOR COLLEGES AND UNIVERSITIES



10

23

24

- 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. The peak of dropouts makes little sense in such cases, since these students never enrolled in a degree or certificate program from which they could drop out. This indicates the importance of distinguishing between former students and graduates or program completers, and following up the students who complete a degree or certificate program. Questionnaires for surveying students at five of the six points are currently available, and a questionnaire for following up students three to five years after they have completed their degree or certificate program will soon be added.

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

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

SCHEDULES AND ADMINISTRATION CYCLES

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

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

In general, surveys should be conducted at about the time that outcomes or events of interest happen to the student. This ensures that students can more easily recall their feelings, attitudes, reasons for decisions, and so forth. Thus the Entering-Student Questionnaire should be given to students with confirmation/acceptance materials when they register or shortly after they enroll. The Program-Completer/Graduating-Student Questionnaire should be given about two to four weeks before graduation. The Continuing-Student Questionnaire can be administered any time¹ during the academic year, depending on the information to be collected from the survey. The Former-Student Questionnaire should be administered as soon as students who have not returned can be identified. (Many institutions may want to conduct only one former-student survey—for example, an attrition survey—each year. In this instance, a good administration time is shortly after the start of a new term. Spring semester or winter quarter is good if an institution wishes to stagger the time of administration of the various surveys in the plan.)

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

The second issue to be considered in developing a plan for routinely collecting student-outcomes data is 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 unrealistic. Surveys can be staggered effectively across several years if institutions remember that for most purposes

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

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
Alumni Follow-Up	Three to five years after graduation when alumni have begun to follow relatively stable career paths		

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

- Survey every entering student group and then follow up each group as needed or according to a cyclical plan such as is suggested by model 1 in figure 3.
- Survey all or a sample of *selected* entering student groups at set intervals (every two or three years) and follow up each group of surveyed entering students as needed or according to a cyclical plan such as is suggested by model 2 in figure 3.

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

Institutions should consider many other variations of the outcomes data-collection cycle. For example, another possible data-collection plan would be to administer the Entering-Student survey every two years and at times appropriate for each subsequent questionnaire, and then follow up the initial group of students as they progress through and out of the institution. Another plan would be to administer the Entering-Student and Former-Student surveys each year but conduct the Continuing-Student, Program-Completer/Graduating-Student, and Recent-Alumni surveys only to every third year's group of entering students. In this plan, every third year the institution would have new information concerning graduates, current students, and alumni/former students; each year they would have up-to-date information about entering students and former or non-returning students.

FIGURE 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
MODEL 2						
Entering Student	X		X		X	
Former Student	X mid-term		X mid-term		X mid-term	
Program Completer		X		X		X
Recent Alumni			X		X	

Guidelines for Planning and Administering Questionnaire Surveys

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

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

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

- *What concepts must be defined before the survey process continues?*

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

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

- *What assumption will be made?*

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

INSTITUTION-WIDE INVOLVEMENT

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

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

SURVEY-DESIGN CONSIDERATIONS

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

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

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

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

SAMPLING CONSIDERATIONS

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

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

Because administering questionnaires to all students can be costly, particularly

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

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

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

OBTAINING AND ADAPTING THE SOIS QUESTIONNAIRES

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

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

1. An easy method for randomly selecting students using the computer is to decide on the percentage of students to be sampled, then convert this percentage, say 20 percent, to a fraction (2/5). The computer can then be programmed to generate a random number (uniformly distributed over the interval zero to one) for each student record or ID as it is read. If the random number is less than or equal to the fraction, the student is included in the sample, and if larger than the fraction, the student is excluded from the sample. Student records for those in the sample can, during the execution of this program, be written into a new file for mailing. The method can be done also without the computer, using a table of random numbers.

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

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

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

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

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

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

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

FIGURE 4

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

35

FIGURE 5

AN EXAMPLE OF A SET OF LOCAL QUESTIONS ADDED TO A
FORMER-STUDENT QUESTIONNAIRE

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

19. How 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 _____

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

ALTERNATIVES FOR ADMINISTERING THE SOIS QUESTIONNAIRES

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

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

Where it is not necessary to assure that specific students respond to the questionnaire or where the total student body is to participate in the study, a number of different methods for administering the survey is available. One alternative is to give the questionnaires to instructors who will distribute and then collect them during class meetings. If all students are required to take a certain class, a sample of class meetings can be identified, perhaps all those meeting at 10:00 A.M. on Monday and 4:00 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 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 the material be returned as part of the normal registration procedure. This method is effective when either the entire population or a sample of students is used. The advance planning time required for a study will be extended to the extent that the registration packets are prepared in advance

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

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

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

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

COVER LETTERS AND MEMOS FOR THE SOIS QUESTIONNAIRES

Whether 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, signed by the president. The letter should:

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

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

COST MATERIALS, AND PERSONNEL FOR ADMINISTERING THE QUESTIONNAIRES

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

One study (Rossman and Astin 1974) indicates that nonprofit permits on the outer envelope combined with a follow-up mailing using first-class postage yields response rates only 2 percent to 3 percent less than the first-class postage on the initial mailing. Thus an institution should 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 address and send out new envelopes, but for many community colleges, extra staff time is more readily available than extra sources of funds.

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

FIGURE 6

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 \$.10	\$100.00	\$100.00	\$100.00
Cover Letters	1,000	Printed on official stationery	16.60	16.60	16.60
Return Envelopes (Size No. 9)	1,000	Business reply return envelopes (a) Printing costs (b) Postage stamps at \$.15 each × 300 returned	16.80 45.00	16.80 45.00	
Mailing Envelopes (Size No. 10)	1,000	Standard business size	19.80	19.80	
First Class Postage	1,000	First class commemorative stamps at \$.15 each	150.00		
Nonprofit Permits First Class Postage for Undeliverables	1,000	(a) Nonprofit permits at \$.027 each (b) Estimated 10 percent undeliverables at \$.15 each		27.00 15.00	
TOTAL			348.20	240.20	116.60
Per Student Contact Costs			\$.35	\$.24	\$.12
Per Student Response Costs (estimating 300 responses)			\$ 1.16	\$.80	\$.39

*As of 1979.

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

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

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

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

TRACKING MAILED-OUT QUESTIONNAIRES

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

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

FIGURE 7

SUGGESTED FORM FOR LISTING OF SAMPLE AND SURVEY STATUS

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

FIGURE 8

EXAMPLE OF LISTING OF WESTERN COLLEGE SAMPLE AND SURVEY STATUS

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

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

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

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

FOLLOW-UP MAILING STRATEGIES

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

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

FIGURE 9

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

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

*As of 1979.

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

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

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

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

CHECKLIST OF SURVEY-PLANNING AND ADMINISTRATION ACTIVITIES

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

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

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

Using the SOIS Questionnaire-Analysis Service

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

- 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 easily be inserted into locally produced interpretive reports

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

HOW TO USE THE QUESTIONNAIRE-ANALYSIS SERVICE

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

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

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

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

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

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

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

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

The Batch Transmittal Form requests the following information:

- *Institutional Study Identification Number.* This number is used to identify different institutions or different campuses for which both individual and group reports are to be prepared. If the questionnaires have been administered as part of a larger, prearranged group study, a special identification number will have been assigned to the institution by the study administrator. If the institution, on its own, is submitting questionnaires from more than one campus or administrative unit and wishes separate analyses, different numbers should be assigned to identify the different entities.
- *Type of Questionnaire Administered.* The individual questionnaires in the different series have different questions and thus require different analyses. The questionnaire identification number ensures that the correct analysis package is used for the type and series of questionnaires included in the batch. (Note again that separate Batch Transmittal Forms must be completed for each different kind of questionnaire submitted for processing and analysis.)
- *Date Questionnaires Were Administered.* This identifies the time of administration of the questionnaires. The date entered here will be printed on the computer analysis for identification purposes. Enter the date in the boxes for month, day, and year.
- *Type and Control of Institution.* Enter the code number that best describes the kind of institution at which the questionnaires have been collected. The code entered here will identify the group of previously participating institutions from which comparative data will be developed, together with the institutionally specific analyses.¹
- *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

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

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

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

OUTPUTS OF THE ANALYSIS SERVICE

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

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

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

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

FIGURE 10

QUESTIONNAIRE BATCH TRANSMITTAL FORM



NCHEMS-College Board Student-Outcomes Information Services

Questionnaire Batch Transmittal Form

Institutional Study Identification Number

Grid for Institutional Study Identification Number

Type of Questionnaire Administered (Complete and separate forms for each type of questionnaire)

CODES FOR DEGREE YEAR SERIES

Table with 3 columns: Questionnaire Type, 2 Year Series, 4 Year Series

Date Questionnaires Were Administered

Grid for Date Questionnaires Were Administered

Type and Control of Institution

- 1. Public two-year
2. Public four-year
3. Private two-year

- 4. Private four-year
5. Other public
6. Other private

Control box

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
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

- 6.1 Master's School or Center
6.2 Other Separate Health Professions Center
6.3 School of Engineering or Technology
6.4 School of Business or Management
6.5 School of Art, Music, or Design
6.6 School of Law
6.7 School of Education
6.8 Other Specialized Institution
6.9 Other Institution Not in the Above Categories
6.0 Unassigned Designation

Control box

Location of Institution: Postal Service State of

Grid for Location of Institution

Number of Questionnaires in this Batch

Grid for Number of Questionnaires in this Batch

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

- A. Keypunch student name, address and ID number on each questionnaire
B. Keypunch student ID number only (cost \$10 per 1000)
C. Keypunch student ID information (cost \$10 per 1000)

Should tape output be produced at \$50 per tape? (Yes/No)

Yes/No box

Track _____

Should multiple copies of the report be prepared at \$20 per copy? (Yes/No)

Yes/No box

Should questionnaires be returned to institution? (Yes/No)

Yes/No box

SOIS Questionnaires submitted by:

Name _____ Institution _____

mailing Address _____

Telephone Number _____

Mail completed Transmittal Form with SOIS Questionnaires to:

SOIS Coordinator, College Board, 100 M Avenue, Suite 100, New York, NY 10017

a multistate region). Special institutional coding may be required to produce meaningful group reports; specific prior arrangements with the Director of SOIS Processing at the College Board are advised.

- Computer-tape output can be provided in a variety of track/density formats. Such output can help an institution perform subsequent detailed or different analyses as local needs and interests dictate.

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

FIGURE 11

SAMPLE TABLE OF CONTENTS FOR SOIS ANALYSIS

	PAGE
1. INTRODUCTION	1
2. PURPOSE AND SCOPE	2
3. DATA SOURCES	3
4. DATA COLLECTION	4
5. DATA PROCESSING	5
6. DATA ANALYSIS	6
7. DATA REPORTING	7
8. DATA EVALUATION	8
9. DATA INTERPRETATION	9
10. DATA APPLICATIONS	10
11. DATA LIMITATIONS	11
12. DATA CONCLUSIONS	12
13. DATA RECOMMENDATIONS	13
14. DATA APPENDICES	14
15. DATA REFERENCES	15
16. DATA GLOSSARY	16
17. DATA INDEX	17
18. DATA CONTACTS	18
19. DATA NOTES	19
20. DATA FOOTNOTES	20
21. DATA BIBLIOGRAPHY	21
22. DATA APPENDIX A	22
23. DATA APPENDIX B	23
24. DATA APPENDIX C	24
25. DATA APPENDIX D	25
26. DATA APPENDIX E	26
27. DATA APPENDIX F	27
28. DATA APPENDIX G	28
29. DATA APPENDIX H	29
30. DATA APPENDIX I	30
31. DATA APPENDIX J	31
32. DATA APPENDIX K	32
33. DATA APPENDIX L	33
34. DATA APPENDIX M	34
35. DATA APPENDIX N	35
36. DATA APPENDIX O	36
37. DATA APPENDIX P	37
38. DATA APPENDIX Q	38
39. DATA APPENDIX R	39
40. DATA APPENDIX S	40
41. DATA APPENDIX T	41
42. DATA APPENDIX U	42
43. DATA APPENDIX V	43
44. DATA APPENDIX W	44
45. DATA APPENDIX X	45
46. DATA APPENDIX Y	46
47. DATA APPENDIX Z	47

FIGURE 12

SAMPLE INDEX FOR SOIS ANALYSIS

QUESTION	DESCRIPTION	PAGE
7A	ACADEMIC GOALS	10
8	AGE	10
9	CAREER IMPROVEMENT GOALS	10
10A	CAREER REPARATION GOALS	10
11	CLASSES - PREP - FREEDOM	10
12A	CURRENT DEGREE PLAN	10
13	EMPLOYMENT - DURING SCHOOL	10
14	ENROLLMENT STATUS	10
15	ETHNIC BACKGROUND	10
16	FINANCIAL AID GRANTS	10
17	LEARNED ABOUT THE COLLEGE	10
18	MAJOR AREA OF STUDY	10
19	MARITAL STATUS	10
20A	MOOT IMPROVEMENT GOALS	10
21	PERMANENT RESIDENCE	10
22	PERSONAL QUALIFICATIONS - PERSONAL	10
23	PERSONAL QUALIFICATIONS - PERSONAL	10
24	PERSONAL QUALIFICATIONS - PERSONAL	10
25	PREVIOUSLY ENROLLED IN A COLLEGE	10
26	REASON FOR ATTENDING COLLEGE	10
27	REASON FOR ATTENDING COLLEGE	10
28	REASON FOR ATTENDING COLLEGE	10
29	REASON FOR ATTENDING COLLEGE	10
30	REASON FOR ATTENDING COLLEGE	10
31	REASON FOR ATTENDING COLLEGE	10
32	REASON FOR ATTENDING COLLEGE	10
33	REASON FOR ATTENDING COLLEGE	10
34	REASON FOR ATTENDING COLLEGE	10
35	REASON FOR ATTENDING COLLEGE	10
36	REASON FOR ATTENDING COLLEGE	10
37	REASON FOR ATTENDING COLLEGE	10
38	REASON FOR ATTENDING COLLEGE	10
39	REASON FOR ATTENDING COLLEGE	10
40	REASON FOR ATTENDING COLLEGE	10
41	REASON FOR ATTENDING COLLEGE	10
42	REASON FOR ATTENDING COLLEGE	10
43	REASON FOR ATTENDING COLLEGE	10
44	REASON FOR ATTENDING COLLEGE	10
45	REASON FOR ATTENDING COLLEGE	10
46	REASON FOR ATTENDING COLLEGE	10
47	REASON FOR ATTENDING COLLEGE	10
48	REASON FOR ATTENDING COLLEGE	10
49	REASON FOR ATTENDING COLLEGE	10
50	REASON FOR ATTENDING COLLEGE	10
51	REASON FOR ATTENDING COLLEGE	10
52	REASON FOR ATTENDING COLLEGE	10
53	REASON FOR ATTENDING COLLEGE	10
54	REASON FOR ATTENDING COLLEGE	10
55	REASON FOR ATTENDING COLLEGE	10
56	REASON FOR ATTENDING COLLEGE	10
57	REASON FOR ATTENDING COLLEGE	10
58	REASON FOR ATTENDING COLLEGE	10
59	REASON FOR ATTENDING COLLEGE	10
60	REASON FOR ATTENDING COLLEGE	10
61	REASON FOR ATTENDING COLLEGE	10
62	REASON FOR ATTENDING COLLEGE	10
63	REASON FOR ATTENDING COLLEGE	10
64	REASON FOR ATTENDING COLLEGE	10
65	REASON FOR ATTENDING COLLEGE	10
66	REASON FOR ATTENDING COLLEGE	10
67	REASON FOR ATTENDING COLLEGE	10
68	REASON FOR ATTENDING COLLEGE	10
69	REASON FOR ATTENDING COLLEGE	10
70	REASON FOR ATTENDING COLLEGE	10
71	REASON FOR ATTENDING COLLEGE	10
72	REASON FOR ATTENDING COLLEGE	10
73	REASON FOR ATTENDING COLLEGE	10
74	REASON FOR ATTENDING COLLEGE	10
75	REASON FOR ATTENDING COLLEGE	10
76	REASON FOR ATTENDING COLLEGE	10
77	REASON FOR ATTENDING COLLEGE	10
78	REASON FOR ATTENDING COLLEGE	10
79	REASON FOR ATTENDING COLLEGE	10
80	REASON FOR ATTENDING COLLEGE	10
81	REASON FOR ATTENDING COLLEGE	10
82	REASON FOR ATTENDING COLLEGE	10
83	REASON FOR ATTENDING COLLEGE	10
84	REASON FOR ATTENDING COLLEGE	10
85	REASON FOR ATTENDING COLLEGE	10
86	REASON FOR ATTENDING COLLEGE	10
87	REASON FOR ATTENDING COLLEGE	10
88	REASON FOR ATTENDING COLLEGE	10
89	REASON FOR ATTENDING COLLEGE	10
90	REASON FOR ATTENDING COLLEGE	10
91	REASON FOR ATTENDING COLLEGE	10
92	REASON FOR ATTENDING COLLEGE	10
93	REASON FOR ATTENDING COLLEGE	10
94	REASON FOR ATTENDING COLLEGE	10
95	REASON FOR ATTENDING COLLEGE	10
96	REASON FOR ATTENDING COLLEGE	10
97	REASON FOR ATTENDING COLLEGE	10
98	REASON FOR ATTENDING COLLEGE	10
99	REASON FOR ATTENDING COLLEGE	10
100	REASON FOR ATTENDING COLLEGE	10

UNDERSTANDING THE COMPUTER ANALYSES

The computer analyses of the SOIS Questionnaire-Analysis Service have been designed to provide the basic core of information needed for preparing local 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 items in the original questionnaire, precedes each analysis. An index, arranged in alphabetical sequence by question content, follows the analysis and helps the user find specific questions among the voluminous output provided. Samples of the first pages of the table of contents and index from the Entering-Student Questionnaire are illustrated in Figures 11 and 12.

In the computer analysis, most items appearing on the questionnaires are cross-tabulated by responses to other items. This permits differential 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. These are summarized in a Question Table and Cross-Tabulation Report that can be found in the computer-generated report immediately after the table of contents.

FIGURE 13

SAMPLE QUESTION TABLE FOR SOIS ANALYSIS

TITLE — COLLEGE BOARD — NATIONAL CENTER FOR EDUCATION — INFORMATION SERVICES
 DIVISION OF ENTERPRISE SYSTEMS

QUALIFICATIONS

DATE — 12/08/78 PROJECT — 1 SAMPLE — 1 DATA SOURCE — TEST DATA FILE DATE — 01/01/79

QUESTION TABLE CREATED BY GST 1

①			②		③	④	⑤
QUESTION NO	PRT#	LOC	LEN	RE	RES	RES	RES
001	1	05	1	1	1	1	1
002	2	06	1	1	1	1	1
003	3	07	1	1	1	1	1
004	4	08	1	1	1	1	1
005	5	09	1	1	1	1	1
010	6	14	1	1	1	1	1
020	7A	15	1	4	1	1	1
030	7B	16	1	4	1	1	1
040	7	21	1	1	1	1	1
050	7D	23	1	4	1	1	1
060	7E	24	1	4	1	1	1
070	8A	26	1	1	20	A	A
080	8B	27	1	1	20	A	A
090	8C	28	1	1	20	A	A
100	9A	39	1	1	1	1	1
110	9B	40	1	1	1	1	1
120	10	41	1	1	1	1	1
130	11	42	1	1	1	1	1
140	12	44	1	1	1	1	1
150	13	45	1	1	1	1	1

NOTE: ... for descriptions corresponding to numbered items.

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

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



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

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

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

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, when a desired response to either question would result in inclusion.

FIGURE 14

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      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 NR
                5 130 00
                6 130 01

HEADING -      ***** ETHNIC BACKGROUND *****
                WHITE      BLACK      BRWN      OTHER      FULL TIME      PART TIME      ②
USED ON -      025 020 040 060 120 160 200

-----

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

HEADING -      ***** AGE *****
                UNDER 21      21 TO 30      31 TO 40      41 TO 50      OVER 50
USED ON -      010 020 030 040 110 120 200

-----

04 ALGORITHM - 1 010 02 03 04 05
                2 010 00 01
                3 02 01 02 03 04 05 06 07
                4 020 00
                5 240 01
                6 240 00

HEADING -      TRANSFER IN      NON TRANSFER      DEGREE      NON DEGREE      TRANSFER OUT      RETURNING
                STUDENT      STUDENT      STUDENT      STUDENT      STUDENT      STUDENT
USED ON -      20 06 010 140 180      ③
    
```

NOTE: See text for descriptions corresponding to numbered items



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

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

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

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

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

FIGURE 15

SAMPLE ITEMS IN THE SOIS ENTERING-STUDENT QUESTIONNAIRE

***** QUES T *****		A DATA ANALYSIS PROGRAM DEVELOPED BY THE ***** COLLEGE BOARD *****										PAGE NO. 5			
<p>..... 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.</p>															
7A ACADEMIC GOALS ①		③		MALES		FEMALES		NOT MARRIED		MARRIED		NOT HANDICAPPED		HANDICAPPED	
		TOT	PCT												
01	TO INCREASE KNOWLEDGE AND UNDERSTANDING	45	37.2	24	53.3 (51.1)	16	35.6 (33.8)	14	25.6 (59.6)	11	24.4 (17.2)	15	33.3 (19.2)	26	57.8 (76.5)
02	TO OBTAIN A CERTIFICATE OR DEGREE	28	23.1	5	12.4 (10.6)	6	13.5 (11.5)	5	12.9 (8.8)	23	52.1 (35.9)	18	40.0 (23.1)	5	11.9 (14.7)
03	TO COMPLETE COURSES NECESSARY TO TRANSFER	16	13.2	1	2.3 (2.1)	15	33.8 (24.8)	1	2.3 (1.8)	15	33.8 (23.4)	15	33.8 (19.2)	1	2.3 (2.9)
04	TO COMPLETE HIGH SCHOOL REQUIREMENTS	17	14.0	17	100.0 (16.2)			2	4.7 (3.5)	15	33.8 (23.4)	15	33.8 (19.2)	2	4.7 (5.9)
05	OTHER ACADEMIC GOALS	15	12.4			15	100.0 (28.8)	15	100.0 (26.3)			15	100.0 (19.2)		
***** TOTAL *****		121	99.8	17	16.5	52	43.0	57	47.1	64	52.9	76	64.5	34	28.1
7A ACADEMIC GOALS		④										FULL TIME		PART TIME	
		ETHNIC BACKGROUND													
				WHITE		BLACK		BROWN		OTHER					
01	TO INCREASE KNOWLEDGE AND UNDERSTANDING	17	14.0	7	15.6 (32.0)	7	15.6 (21.9)	3	6.7 (16.7)	27	60.0 (58.7)			19	42.2 (37.3)
02	TO OBTAIN A CERTIFICATE OR DEGREE	2	1.7	2	4.7 (8.0)	2	4.7 (6.8)	5	11.9 (15.7)	4	9.5 (5.7)	1	2.3 (25.0)	2	4.7 (3.9)
03	TO COMPLETE COURSES NECESSARY TO TRANSFER	1	0.8	1	2.3 (3.1)	1	2.3 (3.1)	15	33.8 (83.3)			1	2.3 (25.0)		
04	TO COMPLETE HIGH SCHOOL REQUIREMENTS	15	12.4	15	100.0 (25.5)	2	4.7 (6.3)					2	4.7 (50.0)	15	33.8 (29.4)
05	OTHER ACADEMIC GOALS									15	100.0 (32.6)			15	33.8 (29.4)
***** TOTAL *****		25	20.7	32	26.4	18	14.9	46	38.9	4	3.3	4	3.3	51	42.1
7A ACADEMIC GOALS		⑤										AGE			
				UNDER 21		23 TO 30		31 TO 50		51 TO 60		OVER 60			
01	TO INCREASE KNOWLEDGE AND UNDERSTANDING	27	22.3	6	13.5 (14.8)	3	6.7 (7.1)	12	26.7 (28.6)						
02	TO OBTAIN A CERTIFICATE OR DEGREE	6	4.9	6	13.5 (16.2)	18	40.9 (46.2)			2	4.7 (100.0)	1	2.3 (100.0)		
		59													

NOTE: See text for descriptions corresponding to numbered items.

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

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

Appendix 4 of the *Handbook* contains samples of some of the kinds of interpretive reports that institutions can prepare from the computer-generated reports of the SOIS Questionnaire-Analysis Service. Institutions should feel free to adapt and use those sample reports in preparing 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.

7

Coding, Processing, and Analyzing the Data

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

HAND CODING AND INSPECTING RETURNED QUESTIONNAIRES

To ensure that students have followed directions and that no inconsistencies 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. If they have been added, they should be hand coded before keypunching so that responses to them can be tabulated along with responses to other questions.

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

KEYPUNCHING

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

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

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

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

COMPUTER EDITING

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

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

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

MATCHING QUESTIONNAIRE DATA TO MASTER-FILE DATA

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

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

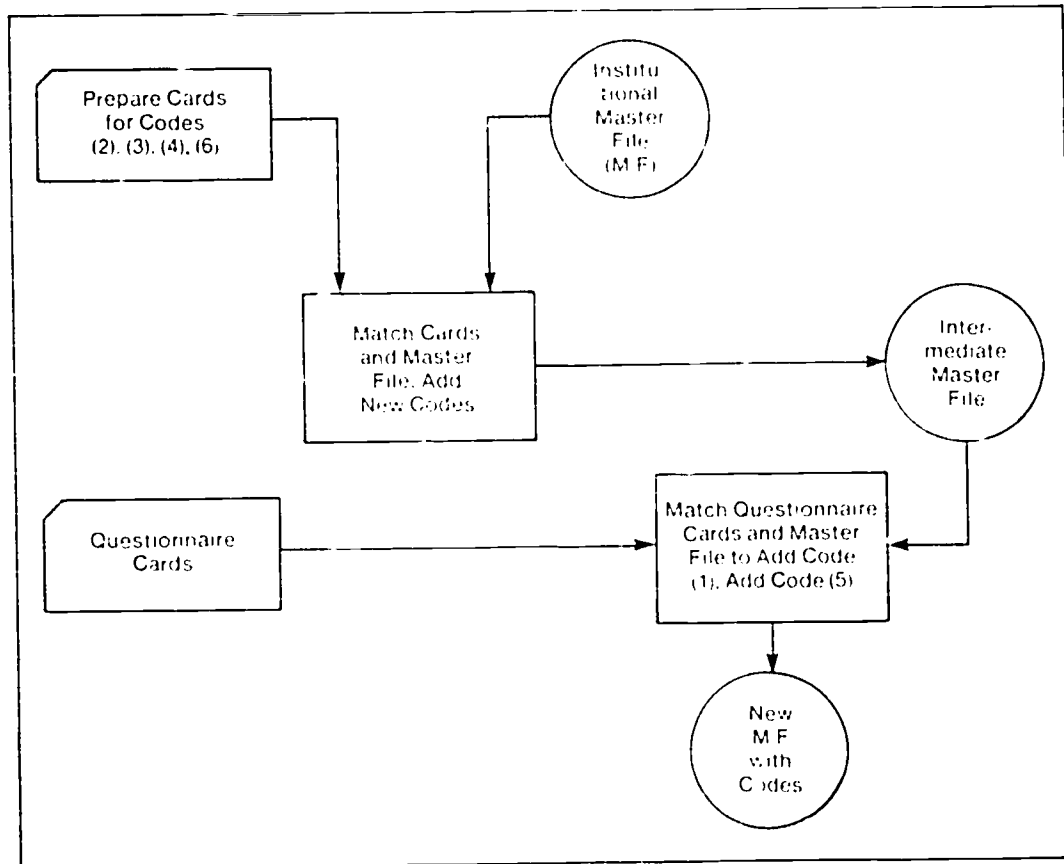
CODE NUMBER	STUDENT STATUS IN SURVEY
(1)	Usable questionnaire returned
(2)	Student excluded from sample because of improper or foreign permanent address
(3)	Student deceased
(4)	Questionnaire returned by post office as undeliverable mail
(5)	No questionnaire returned
(6)	Unusable questionnaire returned

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

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

FIGURE 16

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



PACKAGED COMPUTER PROGRAMS

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

PERFORMING DATA ANALYSES

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

FIGURE 17

SAMPLE TABULATION FOR A QUESTIONNAIRE ITEM
REQUIRING A SINGLE RESPONSE

RACE/ETHNIC IDENTIFICATION		
N	%	
2	0.6	0. American Indian or Alaskan Native
5	1.5	1. Asian, Pacific Islander, or Filipino
51	15.0	2. Black or Afro-American
13	3.8	3. Hispanic, Chicano, or Spanish-speaking American
270	79.2	4. White or Caucasian
0	0.0	5. Other
341	100.0*	TOTAL
10	missing or unusable responses (2.8%)	

*Because of rounding, column does not total 100.0

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

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

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

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

FIGURE 18

SAMPLE TABULATION FOR QUESTIONNAIRE ITEM THAT
ALLOWS FOR MULTIPLE RESPONSES

Goals Important to Recent Alumni When They Attended This College (Total N = 351)		
N	%	Academic Goals
336	95.7	To increase my knowledge and understanding in an academic field
321	91.4	To obtain a certificate or degree
87	24.7	To complete courses necessary to transfer to another educational institution
11	3.1	Other
N	%	Career-Preparation Goals
317	90.3	To discover career interests
207	58.9	To formulate long-term career plans and/or goals
212	60.4	To prepare for a new career
85	24.2	Other

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

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

- Males and females
- Racial/ethnic groups
- Handicapped and nonhandicapped
- Age ranges
- Students' academic award goal—degree, certificate, or neither
- Degree types for graduate students
- Full-time and part-time students
- Employed and unemployed students
- Major or area of study

B. Other Data Analyses. Numerous analytical directions for using the questionnaire data can be pursued beyond the basic descriptive analyses suggested here. These include cross-tabulating items, correlating items to investigate relationships among variables, building predictive models (perhaps using multiple-regression techniques), and testing hypotheses. These analyses will not be discussed here

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

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

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

- Gender
- Race/ethnic category
- Home state
- Age
- Degree sought
- Major field
- Grade-point average
- Number of terms 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.

Using the Survey Results

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

IDENTIFYING THE USERS

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

WHAT KINDS OF REPORTS SHOULD BE PROVIDED?

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

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

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

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

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

MAKING DECISIONS BASED ON INFORMATION

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

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

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

FEEDBACK TO RESPONDENTS

One reinforcing technique that can encourage improved future participation in questionnaire surveys is showing respondents how the results are used. (Providing student feedback is particularly easy with on-campus 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 more involved in the institution. The same result is likely with on-campus students in terms of 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.

References

- BMD, *Biomedical Computer Programs*. Berkeley: University of California Press, 1973.
- Bower, Cathleen P. *Sample Reports from a Student Outcomes Survey*. Boulder, Colo.: National Center for Higher Education Management Systems [NCHEMS], 1977.
- Carpenter, Edwin. "Personalizing Mail Surveys: A Replication and Reassessment." *Public Opinion Quarterly* 38 (Winter 1974-75): 614-20.
- Champion, Dean J., and Seay, Alan M. "Questionnaire Response Rate: A Methodology Analysis." *Social Forces* 47 (March 1969): 335-39.
- Cochran, W.G. *Sampling Techniques*. New York: John Wiley and Sons, 1963.
- Education Directory: Colleges and Universities, 1975-76*. Washington, D.C.: Government Printing Office, 1976.
- Etzel, Michael J., and Walker, Bruce L. "Effects of Alternative Follow-up Procedures on Mail Survey Response Rates." *Journal of Applied Psychology* 59 (April 1974): 219-21.
- Hackler, James C., and Bourgette, Patricia. "Dollars, Dissonance, and Survey Returns." *Public Opinion Quarterly* 37 (Summer 1973): 276-81.
- Hirrichs, J. R. "Effects of Sampling, Follow-up Letters and Commitment to Participation on Mail Attitude Survey Response." *Journal of Applied Psychology* 6 (April 1975): 249-51.

- Huck, Schuyler, and Gleason, Edwin M. "Using Monetary Inducements to Increase Response Rates from Mailed Surveys." *Journal of Applied Psychology* 59 (April 1974): 222-25.
- Lenning, Oscar T. *Previous Attempts to Structure Educational Outcomes and Outcomes-related Concepts: A Compilation and Review of the Literature*. Boulder, Colo.: NCHEMS, 1977.
- _____. *The Outcomes Structure: An Overview and Procedures for Applying it in Postsecondary Education Institutions*. Boulder, Colo.: NCHEMS, 1977.
- Lenning, Oscar T.; Lee, Yong S.; Micek, Sidney S.; and Service, Allan L. *A Structure for the Outcomes of Postsecondary Education*. Boulder, Colo.: NCHEMS, 1977.
- Lenning, Oscar T., and Cooper, Edward M. *Guidebook for Colleges and Universities: Presenting Information to Prospective Students*. Boulder, Colo.: NCHEMS, 1978.
- Linsky, A.S. "A Factorial Experiment in Inducing Responses to a Mail Questionnaire." *Sociology and Social Research* 49 (January 1965): 183-89.
- Marshall, Brian G., and Gee, Carol A. "Mail Questionnaire Research, A Selected Bibliography with Selected Annotations." Council of Planning Librarians, Exchange Bibliography No. 994, 1975.
- Mendenhall, William; Ott, Lyman; and Scheaffer, Richard L. *Elementary Survey Sampling*. Belmont, Calif.: Wadsworth Pub., 1971.
- Micek, Sidney S., and Gray, Robert. *Community College Student Outcomes Questionnaire Booklet*. Boulder, Colo.: NCHEMS, 1978.
- Micek, Sidney, and Arney, William R. *The Higher Education Outcome Measures Identification Study*. Boulder, Colo.: Western Interstate Commission for Higher Education, 1974.
- Oppenheim, A.N. *Questionnaire Design and Attitude Measurement*. New York: Basic Books, Inc., 1966.
- OSIRIS III: An Integrated Collection of Computer Programs for the Management and Analysis of Social Science Data*. Ann Arbor, Mich.: University of Michigan, 1973.
- Romney, L.C. "Institutional Goal Achievement: Measures of Progress." Ph.D. dissertation, University of Colorado, 1976.
- Rossman, J.E., and Astin, A.W. "Cost Effectiveness of Differential Techniques for Mail Questionnaires." *Research in Higher Education* 2 (September 1974): 273-79.
- SPSS: Statistical Package for the Social Sciences*. 2nd ed. New York: McGraw-Hill Book Co., 1975.
- Wiseman, Frederick. "Factor Interaction Effects in Mail Survey Response Rates." *Journal of Marketing Research* 10 (August 1973): 330-33.

APPENDIX 1

The Two-Year Colleges
Questionnaires

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 your ethnicity?

- 0 American Indian or Alaskan Native
 1 Asian/Pacific Islander/Other
 2 Black or Afro American
 3 Hispanic, Chicano or other self-describing American
 4 White or Caucasian
 5 Other _____

3. How old are you?

- 0 Under 18
 1 18 to 22 years
 2 23 to 27 years
 3 28 to 30 years
 4 31 to 39 years
 5 40 to 49 years
 6 50 years or more

4. Are you currently married?

- 0 Yes
 1 No

5. Do you see a doctor, have a permanent medical condition, or any other condition that affects your ability to work?

- 0 No
 1 Yes, restricted mobility
 2 Yes, restricted hearing
 3 Yes, restricted vision
 4 Yes, but I perform the same work as if I were not
 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 formalize long-term career plans and goals
 95. G. To prepare for a new career
 96. H. Other _____

Job or Career Improvement Goals

97. I. To improve my knowledge of technical skills and computer applications related to my job or career
 98. J. To increase my chances of a raise and/or promotion
 99. K. Other _____

Cultural and Social Participation Goals

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

Personal Development and Independence Goals

101. P. To increase my self-confidence
 Q. To improve my interpersonal skills
 102. R. To improve my ability to get along with others
 103. S. To gain skills that will assist in my daily life or to become a more complete person
 104. T. To improve my ability to be independent, self-reliant, and adaptable
 105. 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 114 Second Most Important 117 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. 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.

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 to gain 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 To an identity 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. Was our college your first choice?

- 0 Yes
 1 No

16. 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, or 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

- 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 to 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	167	168	169	170	171

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 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 Aids 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 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, along with LIST A, is included only with the Recent Alumni Questionnaire; in all other questionnaires this panel is blank.



Continuing-Student Questionnaire

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

LAST NAME FIRST NAME SEX MALE FEMALE

ALL OTHER NAMES WHICH MAY APPEAR ON YOUR RECORDS _____

STUDENT IDENTIFICATION NUMBER TELEPHONE NUMBER _____

PERMANENT HOME ADDRESS STATE

CITY STATE ZIP CODE

National Center for Higher Education Management Systems
The College Board



B. 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
 1 2 3

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 for each column.

Current	Ultimate	
0	0	Not seeking any other degree
1	1	Continuing to seek a higher level
2	2	Continuing to seek a one-level degree
3	3	Ascertaining need
4	4	Reached the highest attainable degree

10. a) Please write your intended enrollment status when you study at our college.

b) Select three in **List A: Majors and Areas of Study** and explain how you intend to help this college. Number of the three most important items in your area of study table.

11. What is your intended enrollment status?
 a) **Partially for credit** – full time (12 or more hours) each term **enrolled**.
 b) **Full-time for credit** – full-time (less than 12) each term **enrolled**.
 c) **Primarily not for credit**

12. What is your primary employment status?
 a) **Employed** – full time or part time at the time of *Car* – the most appropriate response.
 b) **Employed** – less than half time.
 c) **Employed by time only**.
 d) **Unemployed** but not employed by the time of *Car*.
 e) **Not employed but would like to work**.
 f) **Not employed and do not want to become employed** at our college.

13. When would you prefer to take your classes?

- Weekday mornings
- Weekday afternoons
- Weekday evenings
- Any time during the week
- Anywhere during the weekend
- As an alternative

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

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

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

- Have received financial aid
- Have applied for financial aid at least once
- Have not applied for financial aid but plan to apply in the future
- I do not think I will ever apply

16. The following are some reasons why you would not enroll in our college. The most important reason is _____ and the next most important reason is _____. So that is my _____.

I do not know what to do
 I am too busy
 I have to work
 I have no money
 I have a job
 I do not have the necessary skills
 I do not know where to go
 I do not have a car
 I do not have a home
 I do not have a computer
 I do not have a phone
 I do not have a television
 I do not have a radio
 I do not have a refrigerator
 I do not have a stove
 I do not have a microwave
 I do not have a washing machine
 I do not have a dryer
 I do not have a vacuum
 I do not have a lawnmower
 I do not have a car
 I do not have a home
 I do not have a computer
 I do not have a phone
 I do not have a television
 I do not have a radio
 I do not have a refrigerator
 I do not have a stove
 I do not have a microwave
 I do not have a washing machine
 I do not have a dryer
 I do not have a vacuum
 I do not have a lawnmower

- 0. I do not know what to do
- 1. I am too busy
- 2. I have to work
- 3. I have no money
- 4. I have a job
- 5. I do not have the necessary skills
- 6. I do not know where to go
- 7. I do not have a car
- 8. I do not have a home
- 9. I do not have a computer
- 10. I do not have a phone
- 11. I do not have a television
- 12. I do not have a radio
- 13. I do not have a refrigerator
- 14. I do not have a stove
- 15. I do not have a microwave
- 16. I do not have a washing machine
- 17. I do not have a dryer
- 18. I do not have a vacuum
- 19. I do not have a lawnmower

ADDITIONAL QUESTIONS SECTION

Additional questions may have been added to this section from the previous year. If you have any 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"/>	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Please use this space to add any comments, questions, or anything else you may want to mention.

4

REPRODUCED BY
NCSU LIBRARY

83

74



Program-Completer and Graduating-Student Questionnaire

PERSONAL IDENTIFICATION SECTION

Do not complete this section unless you are a first-time registrant.

NAME [10 boxes] SURNAME [10 boxes] MIDDLE [5 boxes] INITIALS [5 boxes]

THE FOLLOWING NAME WILL BE PRINTED IN ALL CAPS ON YOUR IDENTIFICATION CARD

PROGRAMS IN WHICH YOU HAVE MAJORED [10 boxes]

PERMANENT MAILING ADDRESS [15 boxes]

ZIP [5 boxes] STATE [2 boxes] COUNTRY [5 boxes]

National Center for Higher Education Management Systems
The College Board



STANDARD QUESTIONS SECTION

INSTRUCTIONS:

Special 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

1. Are you currently married?

0. Yes
1. No

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

1. Are you currently employed?

0. Yes
1. No

2. How long have you been in the United States?

0. A year or less
1. 1 to 2 years
2. 3 to 5 years
3. 6 to 10 years
4. 11 to 15 years
5. 16 to 20 years
6. 21 to 25 years
7. 26 to 30 years
8. 31 years or more

3. How long have you been in the United States?

0. A year or less
1. 1 to 2 years
2. 3 to 5 years
3. 6 to 10 years
4. 11 to 15 years
5. 16 to 20 years
6. 21 to 25 years
7. 26 to 30 years
8. 31 years or more

4. Are you currently employed?

0. Yes
1. No

5. Do you feel that you have experienced discrimination?

0. No
1. Yes, restricted mobility
2. Yes, restricted mobility
3. Yes, restricted mobility
4. Yes, restricted mobility
5. Yes, restricted mobility
6. Yes, restricted mobility
7. Yes, restricted mobility
8. Yes, restricted mobility

6. How long have you been in the United States?

0. A year or less
1. 1 to 2 years
2. 3 to 5 years
3. 6 to 10 years
4. 11 to 15 years
5. 16 to 20 years
6. 21 to 25 years
7. 26 to 30 years
8. 31 years or more

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

	Best goals are important to me at this time	Goals I am achieving or have achieved
		<u>Academic Goals</u>
01. A	00. A	To increase my knowledge and understanding in an academic field.
01. B	01. B	To obtain a certificate or degree.
01. C	02. C	To complete coursework necessary to transfer to another educational institution.
01. D	03. D	Other
		<u>Career Preparation Goals</u>
02. E	04. E	To become a self-employed person.
02. F	05. F	To obtain long-term employment with a firm.
02. G	06. G	To prepare for a new career.
02. H	07. H	Other
		<u>Personal Development Goals</u>
03. I	08. I	To improve my knowledge of English skills and my comprehension of my native language.
03. J	09. J	To improve my ability to read and understand English.
03. K	10. K	To become a better participant in my community.
03. L	11. L	To become a better participant in my community.
03. M	12. M	To become a better participant in my community.
03. N	13. N	To become a better participant in my community.
03. O	14. O	To become a better participant in my community.
03. P	15. P	To become a better participant in my community.
03. Q	16. Q	To become a better participant in my community.
03. R	17. R	To become a better participant in my community.
03. S	18. S	To become a better participant in my community.
03. T	19. T	To become a better participant in my community.
03. U	20. U	To become a better participant in my community.
03. V	21. V	To become a better participant in my community.
03. W	22. W	To become a better participant in my community.
03. X	23. X	To become a better participant in my community.
03. Y	24. Y	To become a better participant in my community.
03. Z	25. Z	To become a better participant in my community.



8. For each 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

9. Which of the following are your reasons for attending college?

- To obtain a certificate or degree
- To obtain a certificate or diploma
- To gain experience
- To explore a career

10. Please write the name of the college you are attending in the space below.

11. Select one or more from List A, Majors and Areas of Study, and List B, Areas of Interest, that apply to you. Enter the code for each one in the box below.

11. Are you currently employed while attending college?

- Yes, full-time (1.5 or more hours per week)
- Yes, part-time (less than 1.2 hours per week)
- No, not employed

12. From the program you are now completing, how many credits earned from another college? **all apply**

- None, they were all earned here
- 1-2 from a public two-year college
- 1-2 from a public four-year college
- 1-2 from a private college or university
- 1-2 from a vocational or technical school
- 3 or more from any type of college

11. The following are some of the services you may receive. How would you describe them to you? (Example: "I do not use college financial services, but I would like to know more about them.")

Indicate how you use the service by marking the appropriate box. If you do not use the service, mark "N" for "Not used." If you would like to know more about the service, but would not use it, mark "I."

	N	I	1	2	3
13. Admissions					
14. Registration					
15. Business office					
16. Academic advising					
17. Guidance, counseling, and testing					
18. Learning writing, math, and foreign language					
19. Tutoring					
20. Minority affairs					
21. College cultural programs					
22. Recreation and athletics					
23. Financial aid					
24. Student employment					
25. Career planning					
26. Job placement					
27. Career counseling					
28. Career assessment					
29. Career information					
30. Career planning					
31. Career counseling					
32. Career assessment					
33. Career information					

14. How do you describe your current financial situation?

- I am currently employed and have sufficient funds to pay my expenses.
- I am currently employed but do not have sufficient funds to pay my expenses.
- I am not currently employed but have sufficient funds to pay my expenses.
- I am not currently employed and do not have sufficient funds to pay my expenses.

15. How do you describe your current financial situation?

- I am currently employed and have sufficient funds to pay my expenses.
- I am currently employed but do not have sufficient funds to pay my expenses.
- I am not currently employed but have sufficient funds to pay my expenses.
- I am not currently employed and do not have sufficient funds to pay my expenses.

16. How do you describe your current financial situation?

- I am currently employed and have sufficient funds to pay my expenses.
- I am currently employed but do not have sufficient funds to pay my expenses.
- I am not currently employed but have sufficient funds to pay my expenses.
- I am not currently employed and do not have sufficient funds to pay my expenses.



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 your 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

Write an open question or a closed question related to the program of your college. If you have been asked to answer additional questions please use the box on the left 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
171	172	173	174	175	176	177	178	179	180	181	182	183	184	185

Write in the space provided below any comments you have about our college, the program, or anything else you care to mention.

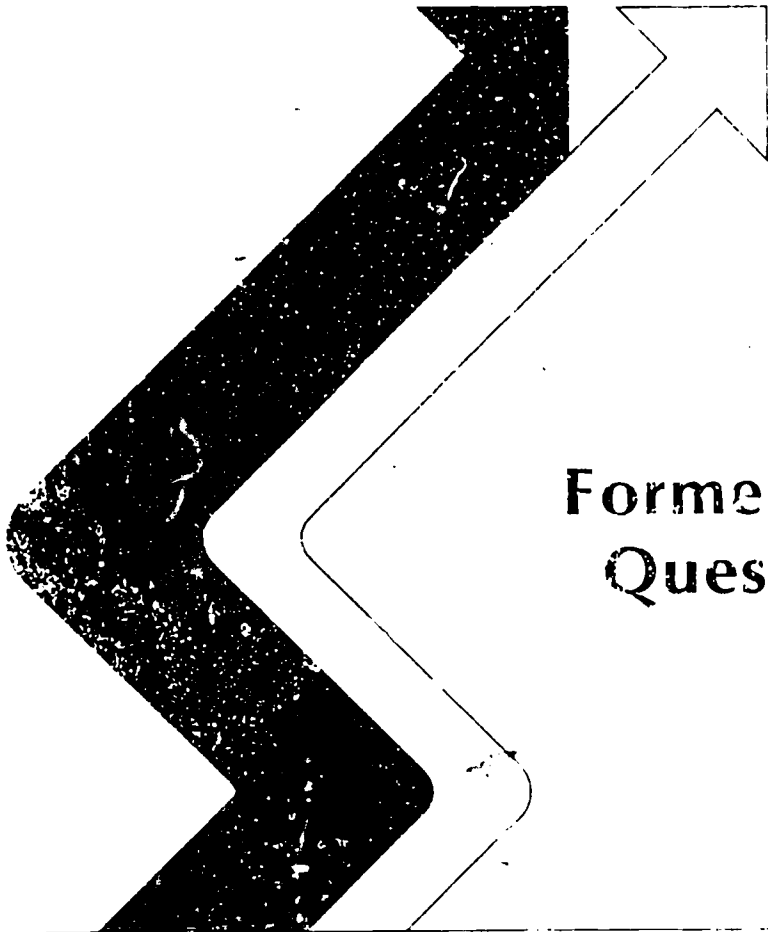
47

MULTIPLE CHOICE

87

78

79



Former-Student Questionnaire

PERSONAL IDENTIFICATION SECTION

Do not complete this section unless you are asked to do so by your placement.

LAST NAME FIRST NAME

ANOTHER NAME WHICH YOU HAVE USED SINCE LEAVING SCHOOL

STUDENT IDENTIFICATION 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 most of the questions in this questionnaire. When no directions are given, please circle the number or letter that is most appropriate. Use "none" or "other" as the answer to questions below.

Simple

4. Are you currently married?

- 0 No
1 Yes

If you are not currently married, please write the number of times you are married.

1. What is your sex?

- 0 Female
1 Male

2. How long have you been in the U.S.?

0 None of the time (born in Mexico)

1 1 to 5 years (born in Mexico)

2 6 to 10 years (born in Mexico)

3 11 to 15 years (born in Mexico)

4 16 to 20 years (born in Mexico)

5 21 to 25 years (born in Mexico)

6 26 to 30 years (born in Mexico)

7 31 to 35 years (born in Mexico)

8 36 to 40 years (born in Mexico)

9 41 to 45 years (born in Mexico)

10 46 to 50 years (born in Mexico)

11 51 to 55 years (born in Mexico)

12 56 to 60 years (born in Mexico)

13 61 to 65 years (born in Mexico)

14 66 to 70 years (born in Mexico)

15 71 to 75 years (born in Mexico)

16 76 to 80 years (born in Mexico)

17 81 to 85 years (born in Mexico)

18 86 to 90 years (born in Mexico)

19 91 to 95 years (born in Mexico)

20 96 to 100 years (born in Mexico)

21 Other (specify)

3. How long have you been married?

- 0 None
1 No

5. Do you feel that you have a sense of purpose?

Circle all that apply

0 No

1 Yes, restricted

2 Yes, somewhat

3 Yes, restricted

4 Yes, somewhat

5 Yes, restricted

6 Yes, somewhat

7 Yes, restricted

8 Yes, somewhat

9 Yes, restricted

10 Yes, somewhat

11 Yes, restricted

12 Yes, somewhat

13 Yes, restricted

14 Yes, somewhat

15 Yes, restricted

16 Yes, somewhat

17 Yes, restricted

18 Yes, somewhat

19 Yes, restricted

20 Yes, somewhat

21 Yes, restricted

22 Yes, somewhat

23 Yes, restricted

24 Yes, somewhat

25 Yes, restricted

26 Yes, somewhat

27 Yes, restricted

28 Yes, somewhat

6. How long do you attend our college?

- 0 None of the time
1 1 to 2 years
2 3 to 4 years
3 5 to 6 years
4 7 to 8 years
5 9 to 10 years
6 11 to 12 years
7 13 to 14 years
8 15 to 16 years
9 17 to 18 years
10 19 to 20 years
11 21 to 22 years
12 23 to 24 years
13 25 to 26 years
14 27 to 28 years
15 29 to 30 years
16 31 to 32 years
17 33 to 34 years
18 35 to 36 years
19 37 to 38 years
20 39 to 40 years
21 41 to 42 years
22 43 to 44 years
23 45 to 46 years
24 47 to 48 years
25 49 to 50 years
26 51 to 52 years
27 53 to 54 years
28 55 to 56 years
29 57 to 58 years
30 59 to 60 years
31 61 to 62 years
32 63 to 64 years
33 65 to 66 years
34 67 to 68 years
35 69 to 70 years
36 71 to 72 years
37 73 to 74 years
38 75 to 76 years
39 77 to 78 years
40 79 to 80 years
41 81 to 82 years
42 83 to 84 years
43 85 to 86 years
44 87 to 88 years
45 89 to 90 years
46 91 to 92 years
47 93 to 94 years
48 95 to 96 years
49 97 to 98 years
50 99 to 100 years
51 Other (specify)

7. The following statements reflect the goals of many college students. In the first column, please circle the letters of the goals that were important to you when you entered our college. In the second column, please circle the letters of the goals you feel you are achieving or have achieved as a result of your experience at our college.

Goals that were important to me

Goals I am achieving or have achieved

Academic Goals

- 0 A To increase my knowledge and understanding in an academic field
1 B To obtain a certificate or degree
2 C To complete courses necessary to transfer to another educational institution
3 D Other (specify)

Career Preparation Goals

- 0 E To discover career interests
1 F To formulate long-term career plan and/or goals
2 G To prepare for my career
3 H Other (specify)

Personal and Improvement Goals

- 0 I To improve my knowledge of general skills
1 J To become more competent in my job or career
2 K To increase my chances of a raise and/or promotion
3 L Other (specify)

Social and Cultural Participation Goals

- 0 M To become actively involved in student life and campus activities
1 N To participate in projects on cultural and ethnic issues
2 O To meet people
3 P Other (specify)

Personal Development and Enrichment Goals

- 0 Q To increase my self-confidence
1 R To improve my leadership skills
2 S To improve my ability to get along with others
3 T To learn skills that will enrich my study life
4 U To become a more complete person
5 V To develop my ability to be independent and to learn and adapt to life
6 W Other (specify)

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

100 200 300

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

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.

--	--	--	--

100 200 300

11. a. Was your 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?

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

0. 4.00 to 3.01
 1. 3.00 to 2.01
 2. 2.00 to 1.01
 3. 1.00 or less
 4. Did not know, or did not have a GPA

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

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?

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?

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 check all that apply **or all of the reasons that contributed to your decision to leave our college.**

Academic Reasons

17. A. Achieved my academic goals
 18. B. Transferred to another college
 19. C. Needed a break from college
 20. D. Courses or programs I wanted were not available
 21. E. Dissatisfied with my academic performance
 22. F. Dissatisfied with the quality of teaching
 23. G. Dissatisfied with the learning environment
 24. H. Course work not what I wanted
 25. I. Unsure of my academic goals
 26. J. Other _____

Financial Reasons

27. K. Did not have enough money to continue
 28. L. Could not obtain sufficient financial aid
 29. M. Could not earn enough money while enrolled
 30. N. Other _____

Other Reasons

31. O. Achieved my personal goals
 32. P. Accepted a job or entered the military
 33. Q. College experience not what I expected
 34. R. Few people I could identify with
 35. S. Moved out of the area
 36. T. Could not work and go to school at the same time
 37. U. Other responsibilities became too great
 38. V. Personal problems
 39. 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 100 Second Most Important 101 Third Most Important 102

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 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.

- | | | | | | |
|-----|---|---|---|---|--|
| 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 | Outgoing 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
194	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 all comments you have about our college, this questionnaire, or anything else you care to share with us.

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 your self? (Check all that apply.)

0. American Indian or Alaskan Native

1. Asian Pacific Islander or Filipino

2. Black or Afro American

3. Hispanic, Chicano or Spanish speaking Mexican

4. White or Caucasian

5. Other _____

3. How old are you?

0. Under 16

1. 18 to 22 years

2. 23 to 25 years

3. 26 to 30 years

4. 31 to 35 years

5. 36 to 40 years

6. 41 to 44 years

7. 45 years or more

4. Are you currently married?

0. Yes

1. No

5. Do you feel that you have a permanent hearing loss or all that apply.

0. No

1. Yes, restricted mobility

2. Yes, restricted hearing

3. Yes, restricted vision

4. Yes, but I prefer not to respond to this question

5. Other _____

6. How long did you attend postsecondary school?

0. One year

1. One year

2. Two years

3. Three years

4. Four years

5. More than four years

7. The following are examples of the kinds of many college students that were important to you during your attended postsecondary education. Circle the letters of those goals that were most important to you and most as a result of your postsecondary education.

The goals were important to me when I attended this college:

These goals I am achieving or have achieved:

- | | | |
|---|---|--|
| <input checked="" type="checkbox"/> 97 | <input checked="" type="checkbox"/> 98 | Academic Goals: |
| <input checked="" type="checkbox"/> A | <input checked="" type="checkbox"/> A | To increase my knowledge and understanding in an academic field |
| <input checked="" type="checkbox"/> B | <input checked="" type="checkbox"/> B | To obtain a certificate or degree |
| <input checked="" type="checkbox"/> C | <input checked="" type="checkbox"/> C | To complete courses necessary to transfer to another educational institution |
| <input checked="" type="checkbox"/> D | <input checked="" type="checkbox"/> D | Other _____ |
| <input checked="" type="checkbox"/> 99 | <input checked="" type="checkbox"/> 100 | Career-Preparation Goals: |
| <input checked="" type="checkbox"/> E | <input checked="" type="checkbox"/> E | To discover career interests |
| <input checked="" type="checkbox"/> F | <input checked="" type="checkbox"/> F | To formulate long-term career plans and/or goals |
| <input checked="" type="checkbox"/> G | <input checked="" type="checkbox"/> G | To prepare for a new career |
| <input checked="" type="checkbox"/> H | <input checked="" type="checkbox"/> H | Other _____ |
| <input checked="" type="checkbox"/> 101 | <input checked="" type="checkbox"/> 102 | Job or Career Improvement Goal: |
| <input checked="" type="checkbox"/> I | <input checked="" type="checkbox"/> I | To improve my knowledge, technical skills and/or competencies for my job or career |
| <input checked="" type="checkbox"/> J | <input checked="" type="checkbox"/> J | To increase my chances for a raise and/or promotion |
| <input checked="" type="checkbox"/> K | <input checked="" type="checkbox"/> K | Other _____ |
| <input checked="" type="checkbox"/> 103 | <input checked="" type="checkbox"/> 104 | Social and Cultural Participation Goals: |
| <input checked="" type="checkbox"/> L | <input checked="" type="checkbox"/> L | To become actively involved in student life and campus activities |
| <input checked="" type="checkbox"/> M | <input checked="" type="checkbox"/> M | To increase my participation in cultural and social events |
| <input checked="" type="checkbox"/> N | <input checked="" type="checkbox"/> N | To meet people |
| <input checked="" type="checkbox"/> O | <input checked="" type="checkbox"/> O | Other _____ |
| <input checked="" type="checkbox"/> 105 | <input checked="" type="checkbox"/> 106 | Personal Development and Enhancement Goals: |
| <input checked="" type="checkbox"/> P | <input checked="" type="checkbox"/> P | To increase my self-confidence |
| <input checked="" type="checkbox"/> Q | <input checked="" type="checkbox"/> Q | To improve my leadership skills |
| <input checked="" type="checkbox"/> R | <input checked="" type="checkbox"/> R | To increase my ability to get along with others |
| <input checked="" type="checkbox"/> S | <input checked="" type="checkbox"/> S | To learn skills that will enhance my daily life or make me more self-sufficient |
| <input checked="" type="checkbox"/> T | <input checked="" type="checkbox"/> T | To develop my ability to be independent, self-reliant and assertive |
| <input checked="" type="checkbox"/> U | <input checked="" type="checkbox"/> U | Other _____ |
10. Circle the number of the goal you achieved or hope to achieve. Be sure that you circle only one goal for each item. Circle 0 if the goal was not achieved or hope to be achieved. Circle 1 if you achieved the goal, 2 if you are currently working toward it, 3 if you are currently working toward it, 4 if you are currently working toward it, 5 if you are currently working toward it.
- | | | |
|----------------------------|----------------------------|----------------------------|
| Most Important | Second Most Important | Third Most Important |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 |

9. What was the most recent certificate or degree you received 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 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.

--	--	--	--

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

- 135
- 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?

- 136
- 0 Yes, I have taken and passed an exam.
 - 1 Yes, I have taken an exam, but do not yet know the result.
 - 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?

- 137
- 0 Yes
 - 1 No
- If No, skip to question 19

14. a. What kind of college did you first attend after you completed your program at our college?

- 138
- 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, nursing, trade school, or business school
 - 4 Other _____

b. Please write in the name of that college.

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

- 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.)

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.

--	--	--	--

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

- 140
- 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 to your additional college work?

- 141
- 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?

- 142
- 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, or design professional).

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

--	--

21. After completing your program at our college, how long did you look for work before obtaining your first job?
- 153- 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?
- 154- 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?
- 155- 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?
- 156- 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?**
- 157- 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 _____?
- 158- 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 _____ or area of study at our college?
- 159- 0 Yes
 1 No

ADDITIONAL QUESTIONS SECTION

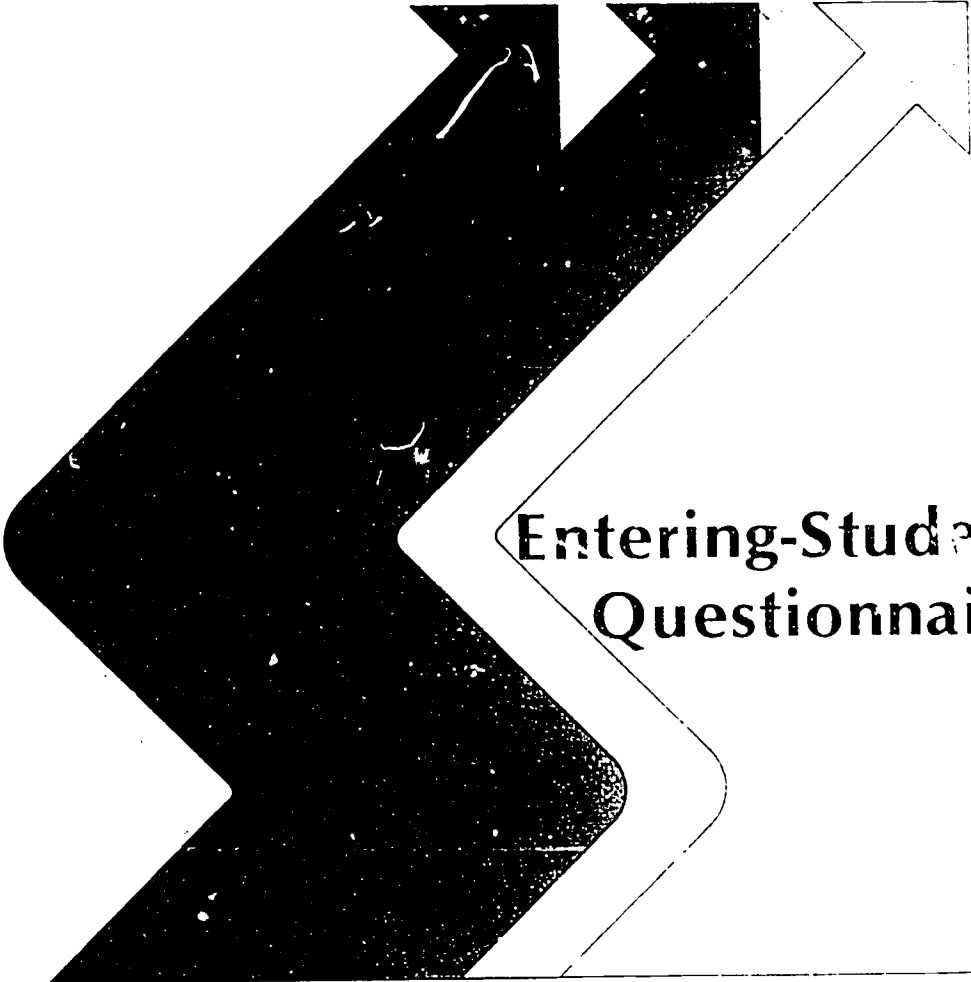
Additional questions may have been added to this printed form by your college. If you have been asked to answer additional questions, please use the boxes below to record your responses.

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

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

APPENDIX 2

The Four-Year Colleges and Universities
Questionnaires



Entering-Student Questionnaire

PERSONAL IDENTIFICATION SECTION

Do not complete this section unless you are asked to do so by the staff.

CMT:

 SSN:

 YES NO

MAJORITY NAME & COLLEGE PREFIX:

 COLLEGE PREFIX:

STUDENT IDENTIFICATION NUMBER:

 INSTITUTION:

PERMANENT HOME ADDRESS NUMBER AND STREET:

CITY:

 STATE:

 ZIP CODE:



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 include the number 1.

1. What is your race?

0. Hispanic
 1. Male

2. How do you describe the ancestry of your father?

0. Asian, Indian, or Asian American
 1. Asian Pacific Islander or Filipino
 2. Black or African American
 3. Hispanic, Mexican, or Spanish-speaking American
 4. White or European
 5. Other _____

3. How old are you?

0. Under 18
 1. 18 to 24 years
 2. 25 to 29 years
 3. 30 to 34 years
 4. 35 to 39 years
 5. 40 to 49 years
 6. 50 to 59 years
 7. 60 years or more

4. Are you currently married?

0. Yes
 1. No

5. Do you feel that you have a problem with alcohol? Circle all that apply.

0. No
 1. Yes, restricted drinking
 2. Yes, restricted drinking
 3. Yes, restricted drinking
 4. Yes, not a problem but sometimes drink too much
 5. Other _____

6. a. Have you previously enrolled in any postsecondary educational institution at your current institution, or have you previously enrolled at another?

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 letter 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 _____

2



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 last 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.

11-114

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 (or partial) college is usually influenced by a variety of factors. Please circle all of the factors that influence your choice to attend our college.

- 13-0 Academic reputation of our college
- 13-1 Course offerings
- 13-2 Former student's advice
- 13-3 Teacher or friend's advice
- 13-4 Counselor's advice
- 13-5 Employer's suggestion
- 13-6 Will help me retain my current employment?
- 13-7 Costs
- 13-8 Availability of financial aid
- 13-9 Institution's social reputation
- 13-10 Close to home
- 13-11 Wanted a change in scenery or location
- 13-12 Range and availability of student services
- 13-13 Team identity with fellow students
- 13-14 Inconvenient to go elsewhere
- 13-15 Other _____

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

- 14-0 From people at my high school
- 14-1 From relatives, friends, or acquaintances
- 14-2 From a representative of this college
- 14-3 From a college placement service or some other education information service
- 14-4 From a college catalog
- 14-5 From a national brochure in the mail
- 14-6 From a national board in a newspaper or magazine
- 14-7 From a radio or TV newscast
- 14-8 From a computer information display at an education fair, shopping center, county fair, or similar locale
- 14-9 Other _____

15. a. Was your 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, or 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

- 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?

Circle one

- 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"/>
19	20	21	22	23	24	25	26	27	28	29	30	31	32
160	161	162	163	164	165	166	167	168	169	170	171	172	173

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

100

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
3900	Interdisciplinary Studies
6000	Other
7000	Undecided but probably program of four or more years

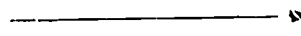
Programs usually requiring less than four years of study

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 , Keypunching , 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 Repairs
- 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

PERSONAL IDENTIFICATION SECTION

Do not complete this section unless you are assessed by the institution.


LAST NAME
 FIRST NAME
 SEX M F

ANOTHER NAME (WHICH MAY APPEAR ON OTHER RECORDS)

STUDENT IDENTIFICATION NUMBER
 PHONE NUMBER

PERMANENT MAILING ADDRESS NUMBER AND STREET

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? (check all that apply)

0 American Indian or Alaska 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 27 years
3 28 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 disability? Circle all that apply.

0 No
1 Yes, restricted mobility
2 Yes, restricted hearing
3 Yes, restricted vision
4 Yes, restricted transfer to the next level of education
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	
80	A	81	A To increase my knowledge and understanding in an academic field
81	B	82	B To obtain a certificate or degree
83	C	84	C To complete courses necessary to transfer to another educational institution
85	D	86	D Other _____
Career Preparation Goals			
87	F	88	F To discover career interests
89	F	90	F To formulate long-term career plans and/or goals
91	C	92	C To prepare for a new career
93	H	94	H Other _____
Job or Career Improvement Goals			
95	F	96	F To improve my knowledge, technical skills and/or competencies for my job or career
97	F	98	F To increase my chances for a raise and/or promotion
99	K	100	K Other _____
Social and Cultural Participation Goals			
101	J	102	J To become actively involved in student life and campus activities
103	M	104	M To increase my participation in cultural and social events
105	K	106	K To meet people
107	L	108	L Other _____
Personal Development and Enrichment Goals			
109	P	110	P To increase my self-confidence
111	Q	112	Q To improve my leadership skills
113	R	114	R To improve my ability to get along with others
115	S	116	S To learn skills that will enrich my daily life or make me a more complete person
117	T	118	T To develop my ability to be independent, self-reliant, and adaptable
119	U	120	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 of degree," enter the letter B in the first box.

Most Important Second Most Important Third Most Important

9. What degree are you **currently** working toward at college, and what is the highest degree you ultimately plan to earn? Circle the number corresponding to:

Current	Ultimate	
<input type="checkbox"/> 0	<input type="checkbox"/> 0	No working on a college degree
<input type="checkbox"/> 1	<input type="checkbox"/> 1	Associate degree
<input type="checkbox"/> 2	<input type="checkbox"/> 2	Bachelor's degree
<input type="checkbox"/> 3	<input type="checkbox"/> 3	Master's degree
<input type="checkbox"/> 4	<input type="checkbox"/> 4	Second degree (e.g., Ed.S.)
<input type="checkbox"/> 5	<input type="checkbox"/> 5	Doctorate (e.g., Ph.D.)
<input type="checkbox"/> 6	<input type="checkbox"/> 6	Professional degree (e.g., M.D., J.D., Ph.D., Ed.D., etc.)

10. Please write only the number of the term you plan to study at your college.

11. See below List A: Majors and Areas of Study and enter in the boxes below the code number of the subject area which is your major or area of study. Fill in:

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
----------------------	----------------------	----------------------	----------------------

1-6-109

11. What is your intended enrollment status?

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

12. What is your primary employment or occupation 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 Anytime

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

- 0 Yes, will complete my program this term
 1 Yes, but plan to return at some future date
 2 Yes, plan to transfer to another college
 3 Yes, have no plans for additional education at this time
 4 Don't know my plans for next term

15. Concerning financial aid, which of the following best describes you?

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

16. The following are services provided by our college. How would you rate the service as provided by our college? (For each service, circle the number of the response that best describes you.)

I did not receive the service	
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
49	50

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

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

Program-Completer and Graduating-Student Questionnaire

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"/>	SEX	<input type="checkbox"/> M <input type="checkbox"/> F
MIDDLE NAME (IF IT MAY APPEAR ON YOUR COLLEGE RECORDS)					
STUDENT IDENTIFICATION NUMBER	<input type="text"/>	PHONE NUMBER	<input type="text"/>		
PERMANENT MAILING ADDRESS NUMBER AND STREET	<input type="text"/>				STATE
CITY	<input type="text"/>	STATE	<input type="text"/>	ZIP CODE	<input type="text"/>

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, circle the number 1.

1. What is your race?

0. Foreign
1. A. Male

2. How is your ethnic heritage? (Check all that apply.)

0. American Indian or Alaska Native
1. Asian Pacific Islander
2. Black or African American
3. Hispanic, Latino or Spanish Speaking American
4. Other

3. How long have you lived in the U.S.?

0. Under 10
1. 10 to 20 years
2. 21 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 physical disability? 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 be considered disabled
5 Other

6. How long have you been at your 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 these 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 |
|-----|---|-----|--|
| 80 | A | 90 | A To increase my knowledge and understanding in an academic field |
| 91 | B | 92 | B To obtain a certificate of degree |
| 93 | C | 93 | C To complete courses necessary to transfer to another educational institution |
| 95 | D | 94 | D Other |
| | | | Career Preparation Goals |
| 97 | E | 95 | E To discover career interests |
| 98 | F | 96 | F To formulate long-term career plans and/or goals |
| 101 | G | 97 | G To prepare for a new career |
| 102 | H | 98 | H Other |
| | | | Job or Career Improvement Goals |
| 103 | I | 99 | I To improve my knowledge, technical skills and/or competencies for my job or career promotion |
| 104 | J | 100 | J To increase my chances for a raise and/or promotion |
| 105 | K | 101 | K Other |
| | | | Social and Cultural Participation Goals |
| 106 | L | 102 | L To become actively involved in student life and campus activities |
| 107 | M | 103 | M To increase my participation in cultural and social events |
| 108 | N | 104 | N To meet people |
| 109 | O | 105 | O Other |
| | | | Personal Development and Enrichment Goals |
| 110 | P | 106 | P To increase my self-confidence |
| 111 | Q | 107 | Q To improve my leadership skills |
| 112 | R | 108 | R To improve my ability to get along with others |
| 113 | S | 109 | S To learn skills that will enrich my daily life or make me a more complete person |
| 114 | T | 110 | T To develop my ability to be independent, self-reliant and adaptable |
| 115 | U | 111 | 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 **a** in the first box.

Most Important Second Most Important Third Most Important

(1) (2) (3)

9. Which of the following are you receiving from your 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.)

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

- b. Now look at List A, Major 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.

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

- 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? Enter all that apply.

- 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 your college? For each service, circle the number of the response that is most appropriate.

- 0 I did not know about this service.
 1 I knew about this service but did not use it.
 2 I used this service and was satisfied with it.
 3 I used this service but was not satisfied with it.

▼ ▼ ▼ ▼

- 131 0 1 2 3 Admissions
 132 0 1 2 3 Registration
 133 0 1 2 3 Business office
 134 0 1 2 3 Academic advising
 135 0 1 2 3 Guidance, counseling, and testing
 136 0 1 2 3 Reading, writing, math, and study skills improvement
 137 0 1 2 3 Tutoring
 138 0 1 2 3 Minority affairs
 139 0 1 2 3 College cultural programs
 140 0 1 2 3 Recreation and athletic programs
 141 0 1 2 3 Financial aid
 142 0 1 2 3 Student employment
 143 0 1 2 3 Career planning
 144 0 1 2 3 Job placement
 145 0 1 2 3 Housing services
 146 0 1 2 3 Cafeteria
 147 0 1 2 3 Health services
 148 0 1 2 3 Library
 149 0 1 2 3 Clinics
 150 0 1 2 3 Bookstore
 151 0 1 2 3 Parking
 152 0 1 2 3 Computer center
 153 0 1 2 3 Center

14. Have you taken any continuing education courses or other non-degree programs at another college or university? If so, how many courses or programs?

- 0 None
 1 One
 2 Two
 3 Three
 4 Four
 5 Five
 6 Six
 7 Seven
 8 Eight
 9 Nine
 10 Ten
 11 Eleven
 12 Twelve
 13 Thirteen
 14 Fourteen
 15 Fifteen
 16 Sixteen
 17 Seventeen
 18 Eighteen
 19 Nineteen
 20 Twenty

15. What are your current employment plans?

- 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 I am not sure.

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

- 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?

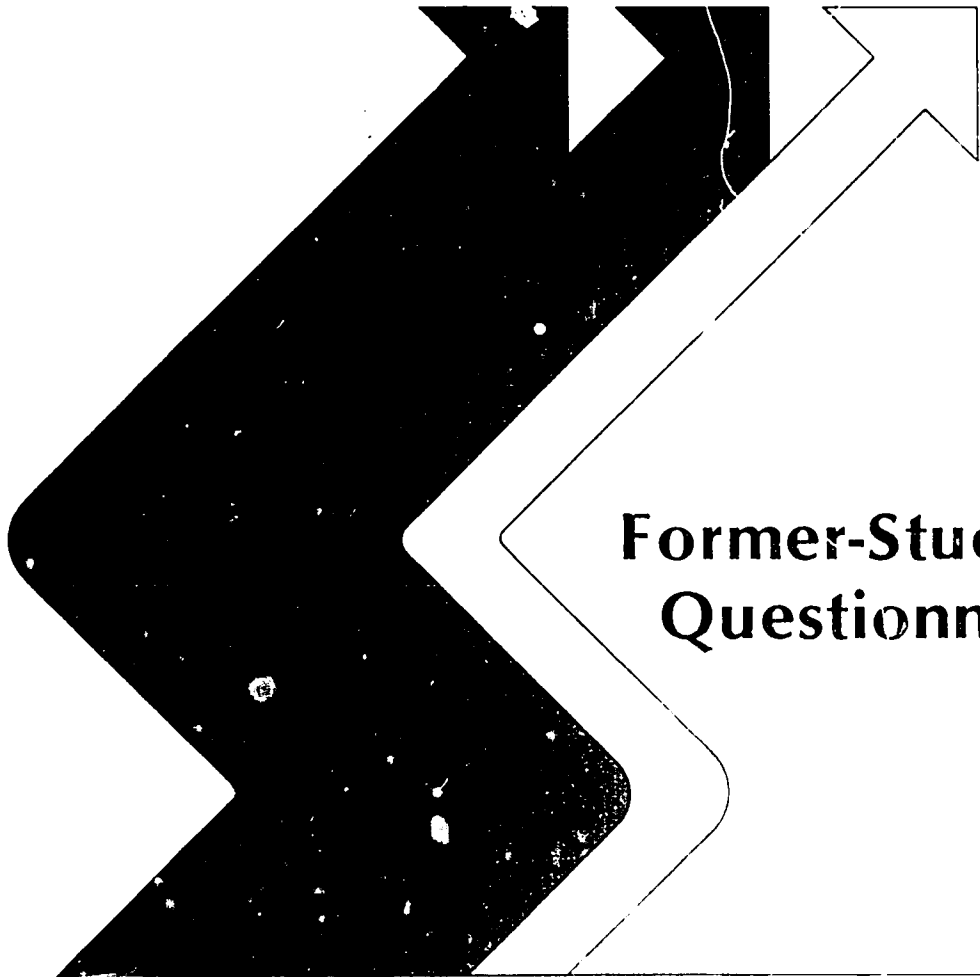
- 0 Certificate
- 1 Associate degree
- 2 Bachelor's degree
- 3 Master's degree
- 4 Specialist degree (e.g., Ed.S.)
- 5 Professional degree (e.g., medicine, law, theology)
- 6 Doctoral degree (e.g., Ph.D., Ed.D., D.B.A.)

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"/>
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 want to share with us.



Former-Student Questionnaire

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"/>
MAGNET PROGRAM (DO NOT WRITE ANYTHING IN THESE SPACES) (PLEASE PRINT)					
STUDENT IDENTIFICATION NUMBER	<input type="text"/>	STUDENT ID NUMBER	<input type="text"/>		
PERMANENT MAILING ADDRESS STREET AND NUMBER	<input type="text"/>				STATE
CITY	<input type="text"/>	STATE	<input type="text"/>	ZIP CODE	<input type="text"/>

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 could circle the number 1.

1. What is your sex?

- 0 Female
 1 Male

2. How do you describe your ethnicity?

- 0 American Indian or Alaska Native
 1 Asian/Pacific Islander
 2 Black or African American
 3 Hispanic or Latino/Latina (including Mexican, Puerto Rican, Cuban, South or Central American, or other Hispanic or Latino/Latina)
 4 White

3. How long have you been in the U.S.?

- 0 1-12 months
 1 1-2 years
 2 2-3 years
 3 3-4 years
 4 4-5 years
 5 5-10 years
 6 10 years or more

4. Are you currently married?

- 0 Yes
 1 No

5. Do you feel that you have experienced any physical limitations?
 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 answer this question
 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

			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	95	D Other
			Career Preparation Goals
97	E	98	E To discover career interests
99	F	99	F To formulate long-term career plans and/or goals
100	G	100	G To prepare for a new career
101	H	101	H Other
			Job or Career Improvement Goals
102	I	102	I To improve my knowledge, technical skills and/or competencies in my job or career
103	J	103	J To increase my chances for a raise and/or promotion
104	K	104	K Other
			Extracurricular and Cultural Participation Goals
105	L	105	L To become actively involved in student life and campus activities
106	M	106	M To increase my participation in cultural and social events
107	N	107	N To meet people
108	O	108	O Other
			Personal Development and Enrichment Goals
109	P	109	P To increase my self-confidence
110	Q	110	Q To improve my leadership skills
111	R	111	R To improve my ability to get along with others
112	S	112	S To learn skills that will enrich my study life or make me a more complete person
113	T	113	T To develop my ability to be independent, self-reliant, and adaptable
114	U	114	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 101 Second Most Important 102 Third Most Important 103

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

- 104
- 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., PhD, 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.

--	--	--	--

105106

11. a. Was our college your first choice?

- 107
- 0 Yes
 - 1 No

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

- 108
- 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)?

- 109
- 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?

- 110
- 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?

- 111
- 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?

- 112
- 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.

A. Academic Reasons

- 113
- 143 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 _____

B. Financial Reasons

- 114
- 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 _____

C. Other Reasons

- 115
- 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 I 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 engagement
- 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 Book store
- 191. 0 1 2 3 Parking
- 192. 0 1 2 3 Campus security
- 193. 0 1 2 3 Other _____

19. 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

20. If you circled responses 2 or 3, please write the name of the college you plan to attend (if you 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 <small>194</small>	21 <small>196</small>	22 <small>197</small>	23 <small>198</small>	24 <small>199</small>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25 <small>205</small>	26 <small>201</small>	27 <input checked="" type="checkbox"/>	28 <small>203</small>	29 <small>204</small>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30 <small>205</small>	31 <small>206</small>	32 <small>207</small>	33 <small>208</small>	34 <small>209</small>

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

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 35 years
 5 36 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 this information
 5 Other _____

6. How long did you attend 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 when I attended this college		These goals I am achieving or have achieved	
		↓		↓	
		Academic Goals			
94	A	94	A	To increase my knowledge and understanding in an academic field	
95	B	95	B	To obtain a certificate or degree	
96	C	96	C	To complete courses necessary to transfer to another educational institution	
96	D	96	D	Other _____	
		Career-Preparation Goals			
97	E	97	E	To discover career interests	
98	F	98	F	To formulate long-term career plans and/or goals	
101	G	101	G	To prepare for a new career	
101	H	101	H	Other _____	
		Job- or Career-Improvement Goals			
105	I	105	I	To improve my knowledge, technical skills and/or competencies for my job or career	
107	J	107	J	To increase my chances for a raise and/or promotion	
109	K	109	K	Other _____	
		Social and Cultural Participation Goals			
111	L	111	L	To become actively involved in student life and campus activities	
112	M	112	M	To increase my participation in cultural and social events	
113	N	113	N	To meet people	
114	O	114	O	Other _____	
		Personal Development and Enrichment Goals			
115	P	115	P	To increase my self-confidence	
116	Q	116	Q	To improve my leadership skills	
117	R	117	R	To improve my ability to get along with others	
118	S	118	S	To learn skills that will enrich my daily life or make me a more complete person	
119	T	119	T	To develop my ability to be independent, self-reliant, and adaptable	
120	U	120	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 94, letter B in the first box.

Most Important Second Most Important Third Most Important

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., EdS)
- 5 Professional degree (e.g., medicine, law, theology)
- 6 Doctoral degree (e.g., PhD, EdD, DBA)

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.

--	--	--	--

144 147

c. 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., EdS)
- 5 Professional degree (e.g., medicine, law, theology)
- 6 Doctoral degree (e.g., PhD, EdD, DBA)

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

- 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.

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

- 0 Yes
 - 1 No
- *If No, skip to question 20.*

f. a. What kind of college did you first attend after you completed your program at our college?

- 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 college:

.....

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

- 0 Certificate
- 1 Associate degree
- 2 Bachelor's degree
- 3 Master's degree
- 4 Specialist degree (e.g., EdS)
- 5 Professional degree (e.g., medicine, law, theology)
- 6 Doctoral degree (e.g., PhD, EdD, DBA)

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?

- 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?

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

19. Are you currently employed?

- 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, trainee).

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.

--	--

144 147

21. After completing your program at our college, how long did you look for work before obtaining your first job?

- 150
- 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?

- 151
- 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?

- 152
- 0 Less than \$1,000 per year
 - 1 \$1,000 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?

- 153
- 0 Excellent preparation
 - 1 Good preparation
 - 2 Adequate preparation
 - 3 Inadequate preparation
 - 4 Not applicable to this job

25. To what extent is was your first job related to your major or area of study at our college?

- 154
- 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?

- 155
- 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?

- 156
- 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
157	158	159	160	161	162	163	164	165	166	167	168	169	170	171

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

APPENDIX 3

Samples of Local Items

Samples of Local Items

INTRODUCTION

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

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

COMMUNICATING LOCAL QUESTIONS TO STUDENTS

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

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

SAMPLE LOCAL ITEMS

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

OVERLAPPING QUESTIONS

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

Similarly, a local question might be added to the Continuing-, Former-, 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.

LOCATER QUESTIONS

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

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

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

MOBILITY QUESTIONS

Some institutions may be interested not only in the areas where 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 while in school to the campus?
- How long does it take you to get from your residence while in school to the campus?
- How many days a week do you park a car on campus?
- What would you do if the daily charge for parking on campus were raised to \$ ____?

If the campus instituted a shuttle bus service from _____ to _____,
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 pattern of financing. Accurate estimates can be determined, depending on the level of complexity and number of local questions added.

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

How would you describe your parents' financial situation?

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

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

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

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

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

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

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

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

How would you prefer to repay money 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 and knowledgeable of the kinds of issues and problems involved in studies of financing patterns. It might be well to involve that person in the survey planning process if this area is to be investigated.

INFORMATION AVAILABILITY AND QUALITY

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

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

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

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

The institution might also be interested in the kind of 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 post-secondary education?

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

EDUCATIONAL SATISFACTION QUESTIONS

Many faculty, administrators, students, and constituents are interested in how students feel about the quality of their educational experiences and whether they are satisfied with the contribution the college has made to growth and development in certain areas. In trying to obtain such information, it is worthwhile initially to gain some understanding about how students value a college education in general, and then ask students questions about the extent of their satisfaction in 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 point in time, do you think that being in college is an important and beneficial experience?

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

OTHER LOCAL QUESTIONS

The list of kinds of questions that a particular institution might wish to add to the standard SOIS questionnaires potentially can be as long as the number of institutions using the questionnaires and the groups of students they will be surveying. As NCHEMS and the College Board gain experience in helping institutions develop local items to be 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 4

Sample Reports from Student-Outcomes Assessment Surveys

INTRODUCTION

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

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

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

SAMPLE 1

A Summary Report for
Governing Boards or Senior Administrators

127

Brookdale College As Entering Students See It

*A Report to the Trustees
Prepared by
L. J. Walter*

INTRODUCTION

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

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

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

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

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

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

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

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

STUDY METHODOLOGY

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

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

GENERAL CHARACTERISTICS OF THE RESPONDENTS

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

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

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

WHAT ARE THEY LOOKING FOR?

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

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

Other goals cited by smaller percentages of the entering students included seeking a way to improve their lifestyle, 39.5 percent; meeting people, 37.7 percent; getting courses needed to transfer to another institution, 35.7 percent; learning how to better get along 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.

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

TABLE 1
GOALS OF STUDENTS ENTERING BROOKDALE COLLEGE
FALL 1978

GOAL	PERCENT OF RESPONDENTS
Prepare for a new career	60.2
Obtain a degree or certificate	56.2
Long-range career development	49.2
Skills to enrich life	47.6
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
Improve skills used on current job	25.2
Discover vocational interests	24.3
Get a raise or promotion	19.6
Participate in cultural and social activities	18.8

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

WHY DO THEY COME HERE?

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

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

TABLE 2

FACTORS INFLUENCING DECISIONS TO ATTEND

FACTOR	PERCENT OF RESPONDENTS
Course offerings	78.6
Convenient to 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

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

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

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

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

HOW DO THEY FIND OUT ABOUT US?

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

Three other “people” sources provided information to some students. Employer recommendations were cited by 13.6 percent of our entering students, information from a guidance counselor by 13.5 percent, and information obtained from a 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.

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

Table 3 also provides insights into the ways in which we might market our image. The importance of our catalog (a frequently undervalued marketing device) and direct mailings 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.

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

And finally, table 3 shows that the traditional method of disseminating information about colleges and universities—a college representative talking to or through a high-school guidance counselor—might well be re-examined. Direct mailing and distributions of the catalog are less expensive ways of reaching prospective students than are the 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.

SUMMARY

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 NCHEMIS and the College Board. It includes responses received from 76.6 percent of the students entering in the fall of 1978. The data from these students indicate that:

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

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

135

SAMPLE 2

A Summary Report for
Governing Boards or Senior Administrators

Executive Summary

Fairview Community College Attrition Survey

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

BACKGROUND DEMOGRAPHIC DATA

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

Overall, about one-third of respondents were enrolled one academic term or less before leaving; almost half were enrolled one year, and the remainder were enrolled longer. Grade point averages were high (3.01 to 4.00) with 8 percent in each category of respondents below a "C" (2.0). In all categories of respondents, the majority were part-time students during their attendance at FCC. Correspondingly, the bulk of respondents were employed while at FCC. Large percentages in all groups were employed full-time (36 or more hours per week). Most respondents were not receiving financial aid.

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

REASONS GIVEN FOR LEAVING

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

EVALUATION OF FCC SERVICES

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

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

CURRENT PLANS OF FCC FORMER STUDENTS

Slightly more than half of the respondents planned to either reenroll at FCC or 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.¹

¹ This latter information is based on one of the local items added to the standard Economic Student questionnaires.

SAMPLE 3

A Report Addressed to a
Particular Problem Area

140

TO: Members of the Inter-Campus Committee on Articulation
FROM: R. Lovell, Director of Admissions
SUBJECT: Review of Current Information Services for Prospective Students
DATE: November 9, 1978

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

At the last Trustees' meeting, Senior Fellow Walter presented information from the Entering-Student Questionnaire we administered through the NCHEMS-College Board Student-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 further surveys of enrolled students, students who leave without completing their programs, and graduating students will be conducted during this year—providing us with information that will help us better understand student decisionmaking. For now, we need to focus on the information from the entering students as we make plans for our "campaign" for new students for the fall of 1979.

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

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

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

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

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

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

TABLE 1

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

SOURCE OF INFORMATION	TOTAL GROUP	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

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

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

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

TABLE 2

SOURCE OF INFORMATION USED BY ENTERING STUDENTS:
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	11.1
Displays	8.9	8.7	8.5
College representative	5.4	4.2	6.8

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

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

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

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 re-emphasize the catalog.
4. Media appear to be a more effective way of reaching students than do individual college representative visits. We should reassess the proportion of resources directed to each kind of activity to see if we can make more productive use of our limited resources.

The admissions office at each of the campuses has been provided with a copy of the analysis of the SOIS 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

Contents

I. INTRODUCTION	151
II. SURVEY-ADMINISTRATION PROCEDURES	152
<i>The Questionnaires and Cover Letters</i>	152
<i>The Sample</i>	152
<i>Response Bias</i>	153
III. ANALYSIS AND RESULTS	153
<i>Background/Status Information</i>	154
<i>Respondents' Goals and Achievements</i>	156
<i>Reasons for Leaving</i>	157
<i>Evaluation of College Services</i>	157
<i>Current Educational Plans</i>	158
IV. SUMMARY	180
APPENDIX: SAMPLE OF QUESTIONNAIRE USED IN STUDY	183

Tables

1. FINAL DISTRIBUTION OF QUESTIONNAIRES	152
2. BACKGROUND/DEMOGRAPHIC INFORMATION FOR TOTAL SAMPLE AND SEPARATELY FOR DEGREE CATEGORIES	159
3. MAJOR OR AREA OF STUDY OF RESPONDENTS FOR TOTAL SAMPLE AND SEPARATELY FOR DEGREE CATEGORIES	164
4. GOALS ASPIRED TO AND GOALS ACHIEVED OR BEING ACHIEVED BY ALL RESPONDENTS	168
5. GOALS ASPIRED TO AND GOALS ACHIEVED OR BEING ACHIEVED BY RESPONDENTS WHO WERE SEEKING A CERTIFICATE	169
6. GOALS ASPIRED TO AND GOALS ACHIEVED OR BEING ACHIEVED BY RESPONDENTS WHO WERE SEEKING AN ASSOCIATE DEGREE	170
7. GOALS ASPIRED TO AND GOALS ACHIEVED OR BEING ACHIEVED BY RESPONDENTS WHO WERE SEEKING NEITHER A CERTIFICATE NOR AN ASSOCIATE DEGREE	171
8. RESPONDENTS' REASONS FOR LEAVING FOR TOTAL SAMPLE AND SUBGROUPS	172
9. THE FIVE MOST IMPORTANT REASONS FOR LEAVING FOR TOTAL SAMPLE AND SUBGROUPS	174
10. RESPONDENTS' AWARENESS, USE AND SATISFACTION WITH COLLEGE SERVICES	175
11. THE FIVE MOST AND LEAST RECOGNIZED SERVICES	178

12.	THE FIVE MOST AND LEAST SATISFACTORY SERVICES BASED ON THE PROPORTION USING WHO WERE SATISFIED	171
13.	RESPONDENTS' FUTURE EDUCATIONAL PLANS	171

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 the 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 re-enroll for one of the three quarters during the academic year 1976/77 (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 a questionnaire. The reader should bear in mind when reading this report that conclusions and inferences are based on the three-eighths of the sample who chose to respond, and to the extent that this group differs from the five-eighths who did not complete a questionnaire, these conclusions and inferences do not apply to the general or typical nonreturning student at Fairview College.

III. ANALYSIS AND RESULTS

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

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

² The adjustment was calculated by first subtracting the 761 undeliverable questionnaires from the base sample of 2,560 resulting in a new base sample of 2,299 students. Then, since 36 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 = 165), and those in neither (N = 574). Since respondents were primarily students who were not seeking a degree or certificate (71 percent), percentages and frequencies for the total sample will be heavily weighted by the responses of the nondegree/noncertificate group.

Background/Status Information. The background and student status information available from the 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 of 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 neither seeking a certificate or an associate degree when they attended FCC. Eight percent of the respondents were seeking a certificate and slightly over 20 percent were seeking an associate degree.
- Of both the degree and certificate seekers, 70 percent had never changed major fields of study and very few (3 to 4 percent) had changed majors more than once.
- Over 65 percent of the respondents in each of the three groups had grade point averages above a “C” (2.01 or better). (It should be noted that almost one-third of the respondents did not respond to this item on the questionnaire.)
- There was a fairly equal split in the part-time/full-time status in certificate-seekers (42.6 percent full-time and 57.4 percent part-time) and associate-degree seekers (47.9 percent full-time and 52.1 percent part-time groups). In the group of respondents who 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 (3 or more hours per week). Certificate seekers were the group with the largest percentage employed full-time (60.7 percent), followed by nondegree/noncertificate seekers (56 percent), and associate-degree seekers (47.6 percent).
- Correspondingly, the bulk of respondents were employed while at FCC. Certificate seekers were the least likely to be employed (13.1 percent), followed by associate-degree seekers (20.1 percent), and

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

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

Table 3 summarizes the majors or areas of study of the respondents. Majors or areas of study for the certificate-seeking group were diverse but tended toward the applied or vocational fields. Two majors accounted for over 44 percent of the respondents in this category: Business and Commerce Technologies (20.6 percent) and Secretarial Technologies (23.8 percent). In the associate-degree group, majors and areas of study were even more diverse, with five majors or areas of study accounting for over half of the respondents: Business and Commerce Technologies (22.4 percent), Public Service Technologies (10.6 percent), Health Services and Paramedical Technologies (8.1 percent), Data Processing Technologies (7.5 percent), and Mechanical and Engineering Technologies (6.2 percent). Of the 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 the questions: What were the respondents' goals when they came to FCC? How are they doing with respect to achieving these goals? As Table 4 shows, the goal pursued by the largest majority of all respondents was "to increase my knowledge and understanding in an academic field" (83.2 percent). The second most pursued goal (54.7 percent) was "to improve my knowledge, technical skills, and/or competencies for my job or career." Correspondingly, these two goals ranked the highest as goals achieved or being achieved by the total respondents group.

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

) obtaining a certificate or degree, (3) preparing for a new career, (4) discovering 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	78	59.1	95	57.6	181	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

*Non-Total may not equal 100% due to rounding error.

TABLE 2 (Continued)

	CERTIFICATE		ASSOCIATE DEGREE		BACHELOR		TOTAL*	
	N	%	N	%	N	%	N	%
Marital Status								
0 Married	25	7.9	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 Attendance								
0 One term	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	574	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	10.0	3	1.8	49	8.5	68	8.2

*Sum Total may not sum to 100% 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	19	8.2	102	27.0	132	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	29	5.1	42	5.3
2 11-20 Hours/Week	5	8.2	17	10.4	42	7.5	64	8.2
3 21-35 Hours/Week	5	8.2	29	17.7	58	10.4	92	11.8
4 36 or More Hours/Week	37	60.7	78	47.6	313	56.0	434	55.5
Total	61	100.0	164	100.0	559	100.0	797	100.0
No Response	5	7.6	1	0.6	15	2.6	21	2.6

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

162

165

16

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	576	95.5	753	93.9
1 Other than Colorado	4	13.8	14	8.5	26	4.5	49	6.1
Total	60	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.

163

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

165

M-171

172

TABLE 3 (Continued)

MAJOR OR AREA OF STUDY	CERTIFICATE		ASSOCIATE DEGREE		NEITHER		TOTAL	
	N	%	N	%	N	%	N	%
Business and Commerce Technologies (includes Accounting, Bookbinding, 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, Key punching)	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

997

173

174

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 Technologies (includes Food Service Supervising, 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	2.2	5	1.5	9	1.6
Undecided but probably less than four-year program	10	15.9	19	11.8	52	15.9	81	14.7

167

175

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>				
1 To increase my knowledge and understanding in an academic field	57	86.4	25	37.9
2 To obtain a certificate or degree	64	97.0	31	47.0
3 To complete courses necessary to transfer to another educational institution	13	19.7	8	12.1
4 To complete high-school requirements	3	4.6	2	3.0
5 Other	11	16.7	3	4.6
<u>Career-Preparation Goals</u>				
1 To discover career interests	15	22.7	4	6.1
2 To formulate long-term career plans and/or goals	18	27.3	6	9.1
3 To prepare for a new career	21	31.8	9	13.6
4 Other	8	12.1	3	4.6
<u>Career-Improvement Goals</u>				
1 To improve my knowledge, technical skills, and/or competencies for my job or career	64	97.0	45	68.2
2 To increase my chances for a raise and/or promotion	42	63.6	24	36.4
3 Other	13	19.7	4	6.1
<u>Social and Cultural-Participation Goals</u>				
1 To become actively involved in student life and campus activities	4	6.1	3	4.6
2 To increase my participation in cultural and social events	2	3.0	2	3.0
3 To meet people	3	4.6	3	4.6
4 Other	0	0.0	0	0.0
<u>Personal-Development and Enrichment Goals</u>				
1 To increase my self-confidence	9	13.6	5	7.6
2 To improve my leadership skills	10	15.2	8	12.1
3 To improve my ability to get along with others	5	7.6	3	4.6
4 To learn skills that will enrich my daily life or make me a more complete person	5	7.6	2	3.0
5 To develop my ability to be independent, self-reliant, and adaptable	2	3.0	2	3.0
6 Other	7	10.6	0	0.0

N = 66

178

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	%
<u>Academic Goals</u>				
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	7	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
<u>Career-Preparation Goals</u>				
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
<u>Career-Improvement Goals</u>				
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	37	22.4	18	11.0
L Other	14	8.5	3	1.8
<u>Social and Cultural Participation Goals</u>				
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
<u>Personal Development and Enrichment Goals</u>				
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 adaptable	21	12.7	10	5.1
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 certificate or degree	3	0.5	0	0.0
C To complete courses necessary to transfer to another educational institution	109	18.4	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	41.1
K To increase my chances for a raise and/or promotion	140	23.6	82	13.6
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	31	5.2	15	2.5
<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 = 591

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 Achieved my academic goals	21	31.8	39	23.6	265	44.8	326	39.5
B Transferred to another college	9	13.5	41	24.8	109	18.3	159	19.3
C Needed a break from college	8	12.1	20	12.1	21	3.5	49	5.9
D Courses/programs I wanted were not available	5	7.6	14	8.5	101	17.0	120	14.5
E Dissatisfied with my academic performance	5	7.6	25	15.1	111	18.7	141	17.1
F Dissatisfied with the quality of teaching	11	16.7	31	18.8	99	16.7	141	17.1
G Dissatisfied with the learning environment	10	15.2	35	21.2	135	22.7	180	21.8
H Course work not what I wanted	13	19.1	42	25.7	77	13.0	132	16.0
I Unsure of my academic goals	11	16.7	25	15.1	109	18.3	145	17.6
<u>Financial Reasons</u>								
J Did not have enough money to continue	22	33.8	65	39.7	169	28.5	256	31.0
K Could not earn enough money while enrolled	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	57	31.1	93	26.9
M Accepted a job or entered the military	5	7.6	14	8.5	107	17.0	126	14.5
N College experience not what I expected	4	6.1	12	7.3	59	6.4	75	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 = 168

N = 594

N = 825

TABLE 9

THE FIVE MOST IMPORTANT REASONS FOR LEAVING
FOR TOTAL SAMPLE AND SUBGROUPS

REASONS FOR LEAVING	CERTIFICATE			ASSOCIATE DEGREE			SLITHER			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	63	56.3	2	251	42.3	1	376	45.6
Achieved my academic goals	1	21	31.8	3	39	23.6	1	266	41.8	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
Achieve my personal goals		9	13.6	2	21	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	3	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

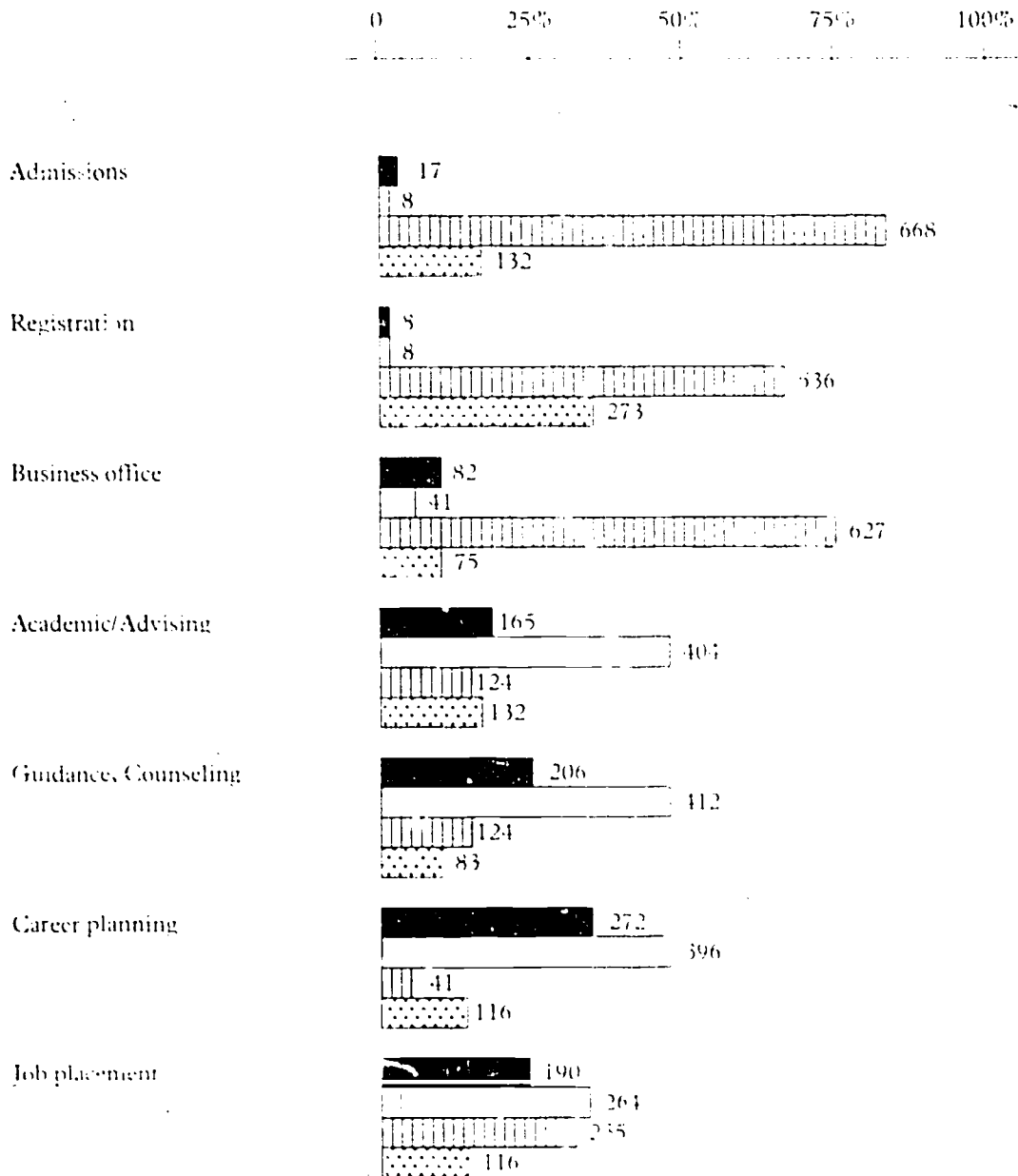






TABLE 10 (Continued)

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

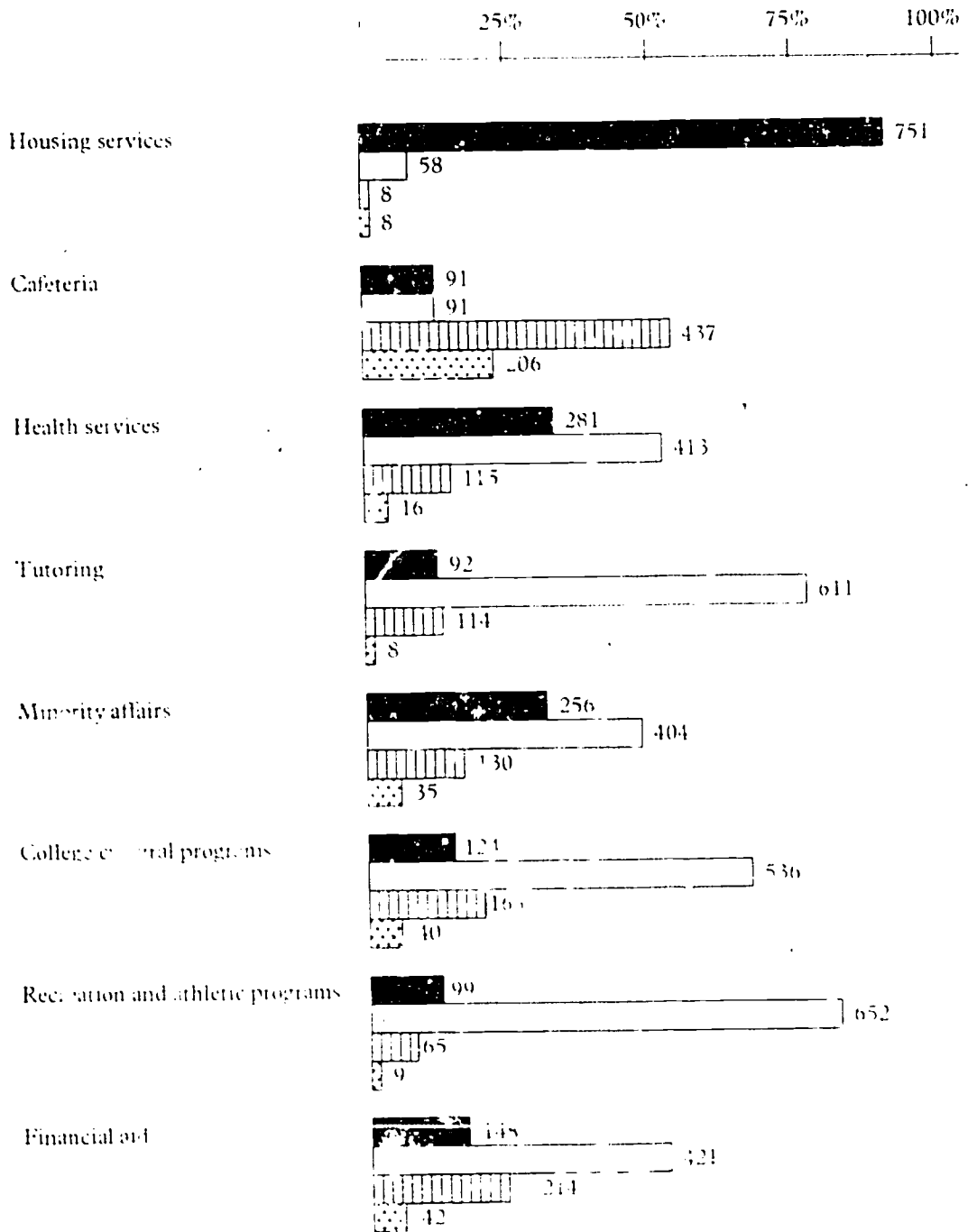






TABLE 10 (Continued)

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

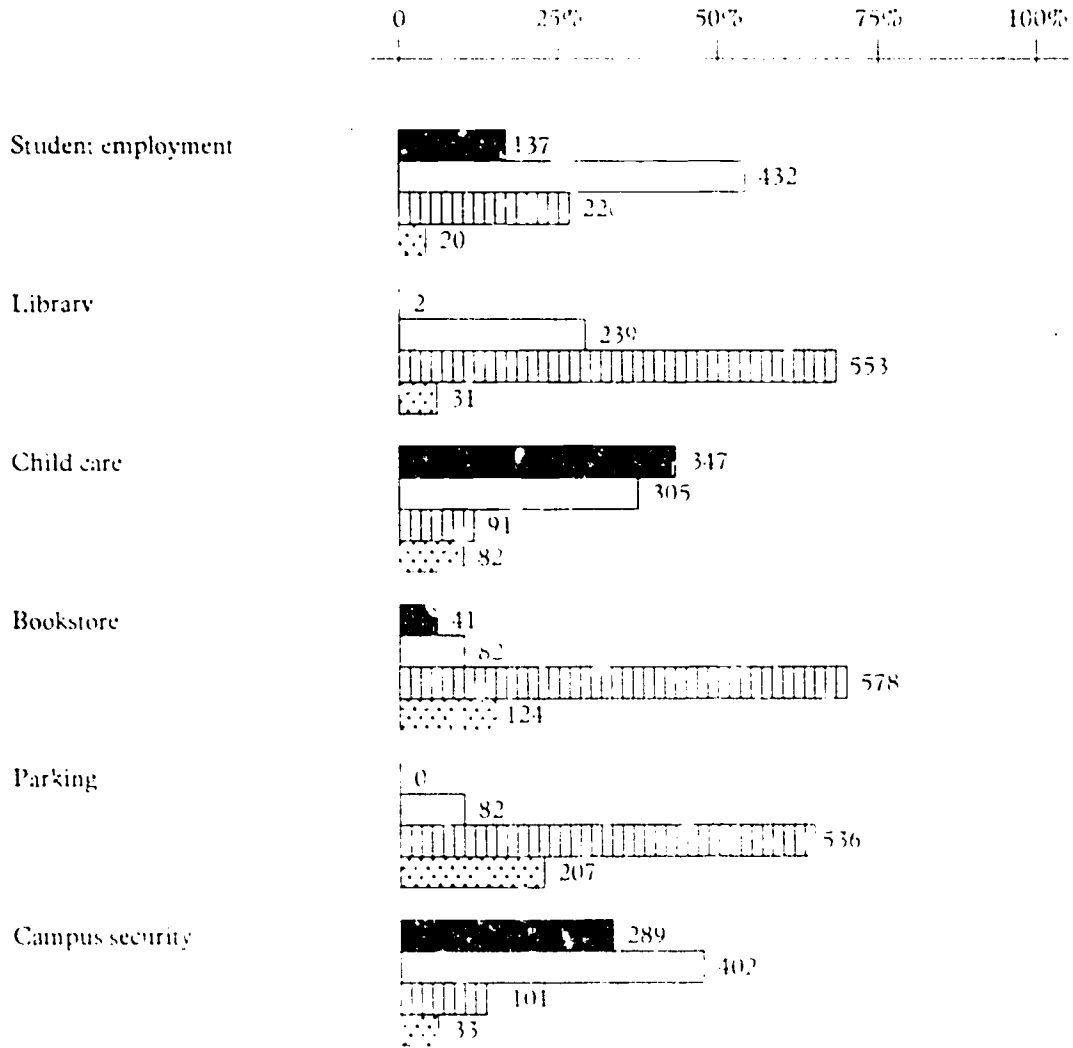


TABLE 11

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 Service	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	256	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 15

Responses to Further Educational Plans

Plans for Additional Education	CERTIFICATE		ASSOCIATE DEGREE		SEMI-P.		TOTAL	
	N	%	N	%	N	%	N	%
No, not at this time	46	41.6	62	38.3	122	58.1	424	54.2
Yes, I plan to enroll at this college	15	12.7	31	19.1	58	10.5	104	13.3
Yes, I plan to enroll at another college	3	4.5	31	21.0	61	11.0	98	12.5
Yes, I have already enrolled at another college	5	7.9	30	18.5	56	11.1	91	11.6
I am currently undecided	3	4.5	5	3.1	7	10.3	65	8.3
Total	66	100.0	162	100.0	554	100.0	782	100.
No Response	0	0.0	3	1.8	10	3.5	23	28.6

179

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 the program.)

Among all three degree groups, three reasons for leaving Fairview surfaced as important: conflict between job and studies, lack of money, and other responsibilities outside of college becoming too great. For those not seeking a degree or certificate, two other reasons were 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 this group, 19 percent planned to reenroll at FCC, 21 percent planned to reenroll at another college, and 48 percent had already reenrolled at another college.

APPENDIX

Sample of Questionnaire
Used in Study

Former-Student Questionnaire

PERSONAL IDENTIFICATION SECTION

Do not complete this section unless you are asked to do so by a proctor.

LAST NAME	<input type="text"/>	FIRST NAME	<input type="text"/>	SEX	<input type="checkbox"/>
MIDDLE NAME (DO NOT WRITE IF NONE)	<input type="text"/>	DATE OF BIRTH	<input type="text"/>		
IDENTIFICATION NUMBER (MID)	<input type="text"/>	IDENTIFICATION NUMBER (LAST)	<input type="text"/>		
ARMY/NAVY/USMC/USAF/USN/USCG NUMBER AND GRADE	<input type="text"/>				
ZIP	<input type="text"/>	STATE	<input type="text"/>	CITY	<input type="text"/>

National Center for Higher Education Management Systems
The College Board



STANDARD QUESTIONS SECTION

INSTRUCTIONS:

Specific directions are given for each question. Read the directions carefully. Information about the test will appear in parentheses in the questions. The test must be applied to the correct number of questions in each part of the test.

Sample:

4. Which of the following is true?



5. Which of the following is true?

1. Do you know how to...?

- Yes
 No

2. Do you know how to...?

- Yes
 No
 Sometimes
 Never

3. Do you know how to...?

- Yes
 No
 Sometimes
 Never
 I don't know

4. Do you know how to...?

- Yes
 No

5. Do you know that you have...?

Circle **all that apply**.

- 0 No
 1 Yes, no restriction
 2 Yes, restricted by...
 3 Yes, restricted
 4 Yes, restricted by...
 5 Yes, restricted by...
 6 Yes, restricted by...
 7 Yes, restricted by...
 8 Yes, restricted by...
 9 Yes, restricted by...

10. Do you know...

6. Do you know how to...?

- Yes
 No
 Sometimes
 Never

7. Do you know...

- Yes
 No

8. Do you know...

- Yes
 No

9. Do you know how to...?

- Yes
 No
 Sometimes
 Never
 I don't know

10. Do you know how to...?

- Yes
 No
 Sometimes
 Never

11. Do you know how to...?

- Yes
 No
 Sometimes
 Never
 I don't know

12. Do you know...

- Yes
 No

13. Do you know how to...?

- Yes
 No
 Sometimes
 Never

14. Do you know...

- Yes
 No
 Sometimes
 Never

15. Do you know...

- Yes
 No
 Sometimes
 Never

16. Do you know how to...?

- Yes
 No
 Sometimes
 Never
 I don't know

17. Do you know how to...?

- Yes
 No
 Sometimes
 Never
 I don't know

18. Do you know how to...?

- Yes
 No
 Sometimes
 Never

19. Do you know how to...?

- Yes
 No
 Sometimes
 Never

20. Do you know how to...?

- Yes
 No
 Sometimes
 Never

21. Do you know how to...?

- Yes
 No
 Sometimes
 Never

22. Do you know how to...?

- Yes
 No
 Sometimes
 Never

B. From the list of goals in question 7, please select the three that were most important to you while in attendance at our college. For each goal, indicate how important that goal was. To do this, a number (1-5) will be written in the circle in the first box.

Most important	<input type="checkbox"/>	Slightly More important	<input type="checkbox"/>	Least important	<input type="checkbox"/>
----------------	--------------------------	-------------------------	--------------------------	-----------------	--------------------------

9. What degree were you pursuing when you graduated?

- 1. Not pursuing a degree
- 2. Certificate
- 3. Associate degree
- 4. Bachelor's degree
- 5. Master's degree
- 6. Equivalent degree or certificate
- 7. Did not receive a degree or certificate
- 8. Other (please specify):

10. Did you work in any of the following types of jobs?

A. Yes. List A Majors and Areas of Study.
Enter the number of the job in the appropriate box.
If you have more than one job, list each one.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

11. If you worked in any of the following types of jobs, what type of job was it?

- 0. Major in two or more areas
- 1. A job in the private 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 you worked at?

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

- 0. 4.00 to 3.01
- 1. 3.00 to 2.01
- 2. 2.00 to 1.01
- 3. 1.00 or less
- 4. Undergrad or did not have course

13. What was your primary reason for leaving? Why did you stop attending?

- 1. I did not receive enough credit to graduate
- 2. I did not receive enough credit to graduate and I did not have the money to continue
- 3. I did not receive enough credit to graduate and I did not have the money to continue and I had other commitments
- 4. I did not receive enough credit to graduate and I did not have the money to continue and I had other commitments and I was not interested
- 5. Other

14. How often did you work and how many hours did you work per week when classes were in session?

- 1. Never worked
- 2. 1-10 hours per week
- 3. 11-20 hours per week
- 4. 21-30 hours per week
- 5. 31 hours or more per week

15. Did you support the following activities while in college?

- 1. Yes, all of the time
- 2. Yes, and I have since
- 3. Yes, but I did not receive credit
- 4. No

16. Are you satisfied with the quality of your education? Do you feel satisfied with the quality of the education you received at all or most of the following places? (Please check all that apply.)

- 1. Very satisfied
- 2. Satisfied
- 3. Not satisfied
- 4. Dissatisfied
- 5. Did not attend
- 6. Did not go to school with the following institution
- 7. Did not go to school with the following institution because of financial reasons

17. How satisfied are you with the following aspects of your education? (Please check all that apply.)

- 1. Very satisfied
- 2. Satisfied
- 3. Not satisfied
- 4. Dissatisfied
- 5. Did not attend
- 6. Did not go to school with the following institution
- 7. Did not go to school with the following institution because of financial reasons

18. How satisfied are you with the following aspects of your education? (Please check all that apply.)

- 1. Very satisfied
- 2. Satisfied
- 3. Not satisfied
- 4. Dissatisfied
- 5. Did not attend
- 6. Did not go to school with the following institution
- 7. Did not go to school with the following institution because of financial reasons



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

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

1. I did not know about this service.
 2. I know about this service but did not use it.
 3. I used this service and was satisfied with it.
 4. I used this service but it was not satisfactory.

- | | | | | |
|--------------------------------|----------------------------|----------------------------|----------------------------|---|
| 19. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Admissions |
| 20. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Registration |
| 21. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Business office |
| 22. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Academic advising |
| 23. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Counseling (career, counseling, etc.) |
| 24. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Reading/writing/math/foreign language improvement |
| 25. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Learning |
| 26. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Minority affairs |
| 27. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | College cultural program |
| 28. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Recreation and athletic programs |
| 29. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Financial aid |
| 30. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Student employment |
| 31. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Course placement |
| 32. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Job placement |
| 33. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Housing services |
| 34. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Cafeteria |
| 35. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Health services |
| 36. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Library |
| 37. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Chapel |
| 38. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Book store |
| 39. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Clubs/org. |
| 40. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Campus security |
| 41. <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | Other _____ |

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

5. If you circled responses 2 or 3, please provide the name of the college you plan to attend (if you are deciding).

ADDITIONAL QUESTIONS SECTION

All usual questions that may have been added to this profile form by your college. If you have been asked to answer additional questions, please enter the boxes for the responses to these questions.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	21	22	23	24
197	198	199	200	201
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	26	27	28	29
202	203	204	205	206
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	31	32	33	34
207	208	209	210	211

Please use the space below for any comments you have about our college. This question is something that you can 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, International Bookkeeping, and Food Service Management, etc.)
1400	Law
1500	Letters (includes Creative Writing, Literature, Philosophy, Speech, etc.)
1600	Library Sciences
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 Services Technologies (includes Stewardess Training, Cosmetologist, etc.)
5100	Data Processing Technologies (includes Computer Programming, Keypunching, 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 Sciences Technologies (includes Agriculture Technology, Environmental Health Technology, Forestry and Wildlife Technology, etc.)
5404	Food Services Technologies (includes Food Service Supervising, Institution of Food Preparation, etc.)
5500	Public Service Technology (includes Law Enforcement Technology, Teacher Aide Training, Vocational Technical and 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 will appreciate your answers to the following additional questions that are important for our study.

Please record your answers to the following questions on the appropriate page provided on the ADDITIONAL QUESTIONS SHEETS.

20. What is the highest degree you currently hold or *are holding*?
0. ED equivalent
 1. High school diploma
 2. Associate degree
 3. Bachelor's degree
 4. Master's degree
 5. Professional degree (DDS, MEd, EdS, MEd)
 6. Doctor's degree (PhD, EdD, EdS)
 7. 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. Above was your permanent residence while you were enrolled in our college?
0. In Colorado
 1. In a state other than Colorado

201

APPENDIX 5

Questionnaire Key punching Formats
Using 80-Column Cards

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

Columns	Item Number	Description	Columns	Item Number	Description		
1-9		Student ID number	4-		Ranked Importance of Goals		
10		Card number 1	5-	1		Most important goal	
11	1	Sex	6-	2		Second Most Important goal	
12	2	Racial/ethnic category	7-	3		Third Most Important goal	
13	3	Age range	8-	4	Current degree aspiration		
14	4	Marital status	9-	5	Ultimate degree aspiration		
15	5.0	Handicap Status	10-	6.0	Major area of study		
16	5.1		No	11-	7.0	Employment status	
17	5.2		Yes, restricted mobility	12-	7.1	Employment status during first year	
18	5.3		Yes, restricted hearing	13-	7.2	Academic reputation of college	
19	5.4		Yes, restricted vision	14-	7.3		Quality of offerings
20	5.5		Yes, but prefer to live on campus	15-	7.4		Common student's advice
21	5.6		Other	16-	7.5	Reputation of friends' advice	
22	6-		Previously enrolled in a college	17-	7.6	Reputation of family	
23	7-A		To increase knowledge and understanding in an academic field	18-	7.7	Employment assistance	
24	7-B		To obtain a certificate or degree	19-	7.8	Will help obtain employment costs	
25	7-C	To complete courses in order to transfer	20-	7.9	Availability of financial aid		
26	7-D	Other Academic Goals	21-	7.10	Institution's social reputation		
27	7-E	To take over my care or ability to	22-	7.11	Cost of tuition		
28	7-F	To formulate long term career plans and/or goals	23-	7.12	Wanted to change location of location		
29	7-G	To prepare for a career	24-	7.13	Range and availability of student services		
30	7-H	Other Career Preparation Goals	25-	7.14	Camden only with fellow students		
31	7-I	To improve education to better knowledge, skills, and/or competencies	26-	7.15	Involvement to go elsewhere		
32	7-J	To increase chances for admission and/or promotion	27-	7.16	Other		
33	7-K	Other Career Goals	28-	7.17	People at my high school		
34	7-L	To become a better prepared student life and campus activities	29-	7.18	Relatives, friends, or acquaintances		
35	7-M	To increase participation in cultural and social events	30-	7.19	College representative		
36	7-N	To meet people	31-	7.20	College placement service		
37	7-O	Other Social and Cultural Participation Goals	32-	7.21	College catalogue		
38	7-P	To increase self-confidence	33-	7.22	Materials in mail		
39	7-Q	To improve leadership skills	34-	7.23	Newspaper or magazine		
40	7-R	To improve ability to get along with others	35-	7.24	Radio or TV advertisement		
41	7-S	To learn skills that will enrich my daily life	36-	7.25	Information display		
42	7-T	To develop ability to be independent, self-reliant, and adaptable	37-	7.26	Other		
43	7-U	Other Personal Development and Enrichment Goals					

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

Item Columns	Item Number	Description
	9	Student ID number
	10	Card number 1
	11	11a Was our college first choice?
	12	12a If no, what kind of college was first choice?
	13	13a Financial aid application plan
	14	14a Time preference for classes
	15	15a Enrollment plans for next term
	16	16a Additional question 1
	17	17a Additional question 2
	18	18a Additional question 3
	19	19a Additional question 4
	20	20a Additional question 5
	21	21a Additional question 6
	22	22a Additional question 7
	23	23a Additional question 8
	24	24a Additional question 9
	25	25a Additional question 10
	26	26a Additional question 11
	27	27a Additional question 12
	28	28a Additional question 13
	29	29a Additional question 14
	30	30a Additional question 15

Additional Questions Section



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

Item Columns Number	Description	Item Columns Number	Description	
1-9	Student ID number	44	7-I	To become actively involved in student life and campus activities
10	Card number "1"	45	7-I*	To become actively involved in student life and campus activities
11	1	46	7-M	To increase participation in cultural and social events
12	2	47	7-M*	To increase participation in cultural and social events
13	3	48	7-N	To meet people
14	4	49	7-N*	To meet people
15	5-0	50	7-O	Other (Social and Cultural Participation Goals)
16	5-1	51	7-O*	Other (Social and Cultural Participation Goals)
17	5-2	52	7-P	To increase self-confidence
18	5-3	53	7-P	To increase self-confidence
19	5-4	54	7-Q	To improve leadership skills
20	5-5	55	7-Q*	To improve leadership skills
21	6	56	7-R	To improve ability to get along with others
22	7-A	57	7-R*	To improve ability to get along with others
23	7-A*	58	7-S	To learn skills that will enrich my daily life
24	7-B	59	7-S*	To learn skills that will enrich my daily life
25	7-B*	60	7-T	To develop ability to be independent, self-reliant, and adaptable
26	7-C	61	7-T*	To develop ability to be independent, self-reliant, and adaptable
27	7-C*	62	7-U	Other (Personal Development and Enrichment Goals)
28	7-D	63	7-U*	Other (Personal Development and Enrichment Goals)
29	7-D*	64	8	Most Important goal
30	7-E	65	8	Second Most Important goal
31	7-E*	66	8	Third Most Important goal
32	7-E	67	9	Current degree aspiration
33	7-E*	68	9	Ultimate degree aspiration
34	7-F	69	10	Major or area of study
35	7-F*	70	11	Intended enrollment status
36	7-F	71	12	Employment status during first term
37	7-F*	72	13	Time preference of 7 classes
38	7-F	73	14	Enrollment plans for next term
39	7-F*	74	15	Enrollment and application plans
40	7-G			
41	7-G*			
42	7-H			
43	7-H*			

Note: Asterisk identifies responses concerning whether or not respondents feel they are achieving or have achieved the goal.

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

Columns	Item Number	Description	
	19	Student ID number	
	30	Card number 2	
	11	Evaluation of Services	Admissions
	12		Registration
	13		Business Office
	14		Academic advising
	15		Guidance, counseling, and testing
	16		Reading, writing, math, and study skills improvement
	17		Tutoring
	18		Minority affairs
	19		College cultural programs
	20		Recreation and athletic programs
	21		Financial aid
	22		Student employment
	23		Career planning
	24		Job placement
	25		Housing services
	26		Cafeteria
	27	Health services	
	28	Library	
	29	Child care	
	30	Bookstore	
	31	Parking	
	32	Campus security	
	33	Other	
	34	Additional Questions Section	Additional question 1
	35		Additional question 2
	36		Additional question 3
	37		Additional question 4
	38		Additional question 5
	39		Additional question 6
	40		Additional question 7
	41		Additional question 8
	42		Additional question 9
	43		Additional question 10
	44		Additional question 11
	45		Additional question 12
	46		Additional question 13
	47		Additional question 14
	48		Additional question 15

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

Item Number	Description	Item Number	Description
19	Student ID number	43	7 N* Other (Job or Career Improvement Goals)
10	Card number - 1	44	7 L To become actively involved in student life and campus activities
11	1 Sex	45	7 L* To become actively involved in student life and campus activities
12	2 Racial/ethnic category	46	7 M To increase participation in cultural and social events
13	3 Age range	47	7 M* To increase participation in cultural and social events
14	4 Marital status	48	7 N To meet people
15	5.0	49	7 N* To meet people
16	5.1	50	7 O Other (Social and Cultural Participation Goals)
17	5.2	51	7 O* Other (Social and Cultural Participation Goals)
18	5.3	52	7 P To increase self-confidence
19	5.4	53	7 P To increase self-confidence
20	5.5	54	7 Q To improve leadership skills
21	6 How long at our college?	55	7 Q* To improve leadership skills
22	7 A To increase knowledge and understanding in an academic field	56	7 R To improve ability to get along with others
23	7 A* To increase knowledge and understanding in an academic field	57	7 R* To improve ability to get along with others
24	7 B To obtain a certificate or degree	58	7 S To learn skills that will enrich my daily life
25	7 B* To obtain a certificate or degree	59	7 S* To learn skills that will enrich my daily life
26	7 C To complete courses necessary to transfer	60	7 T To develop my ability to be independent, self-reliant, and adaptable
27	7 C* To complete courses necessary to transfer	61	7 T* To develop my ability to be independent, self-reliant, and adaptable
28	7 D Other Academic Goals	62	7 U Other (Personal Development and Enrichment Goals)
29	7 D* Other Academic Goals	63	7 U* Other (Personal Development and Enrichment Goals)
30	7 E To discover my career interests	64	8 Most Important goal
31	7 E* To discover my career interests	65	9 Second Most Important goal
32	7 F To formulate long-term career plans and/or goals	66	10 Third Most Important goal
33	7 F* To formulate long-term career plans and/or goals	67	11 What degree or certificate are you receiving from college?
34	7 G To prepare for a new career	68	12 Area or area of study
35	7 G* To prepare for a new career	69	13 Primary enrollment status
36	7 H Other Career Preparation Goals	70	14 For programs now completing were any credits earned from another college?
37	7 H* Other Career Preparation Goals		
38	7 I To improve job/career-related knowledge, skills, and/or competencies		
39	7 I* To improve job/career-related knowledge, skills, and/or competencies		
40	7 J To increase chances for transfer and/or promotion		
41	7 J* To increase chances for transfer and/or promotion		
42	7 K Other (Job or Career Improvement Goals)		

Note: Asterisk identifies responses concerning whether or not respondents feel they are achieving or have achieved the goal.

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

Columns	Item Number	Description	Columns	Item Number	Description
	9	Student ID number	35	15	Current employment plans
	10	Card number 12	36	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?
	11	Admissions			
	12	Registration			
	13	Business office	17	17	Current plans for additional education
	14	Academic advising			
	15	Guidance, counseling, and testing	18	18	Ultimate highest degree aspiration
	16	Reading, writing, math, and study skills improvement	19	19	Additional question 1
	17	Tutoring	20	20	Additional question 2
	18	Minority affairs	21	21	Additional question 3
	19	College cultural programs	22	22	Additional question 4
	20	Recreation and athletic programs	23	23	Additional question 5
	21	Financial aid	24	24	Additional question 6
	22	Student organization	25	25	Additional question 7
	23	Career planning	26	26	Additional question 8
	24	Job placement	27	27	Additional question 9
	25	Housing services	28	28	Additional question 10
		Cafeteria	29	29	Additional question 11
		Health services	30	30	Additional question 12
	26	Library	31	31	Additional question 13
	27	Counseling	32	32	Additional question 14
	28	Bookstore	33	33	Additional question 15
	31	Parking			
	32	Campus security			
	33	Other			
	34	Have you taken any licensing or certification examinations related to your major or area of study at our college?			

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

Item Columns	Item Number	Description	Item Columns	Item Number	Description
	1-9	Student ID number	45	7-1*	To become actively involved in student life and campus activities
	10	Card number 1			
	11	1	46	7-M	To increase participation in cultural and social events
	12	2			
	13	3	47	7-M*	To increase participation in cultural and social events
	14	4	48		To meet people
	15	5-0	49	7-O*	To meet people
	16	5-1	50	7-O	Other (Social and Cultural Participation Goals)
	17	5-2			
	18	5-3	51	7-O*	Other (Social and Cultural Participation Goals)
	19	5-4			
	20	5-5	52	7-I	To increase self-confidence
	21	6	53	7-P*	To increase self-confidence
	22	7-A	54	7-Q	To improve leadership skills
			55	7-Q	To improve leadership skills
	23	7-A*	56	7-R	To improve ability to get along with others
	24	7-B	57	7-R*	To improve ability to get along with others
	25	7-B*			
	26	7-C	58		To learn skills that will enrich my daily life
	27	7-C*	59	7-S*	To learn skills that will enrich my daily life
	28	7-D	60	7-T	To develop ability to be independent, self-reliant, and adaptable
	29	7-D*			
	30	7-E	61	7-U*	To develop ability to be independent, self-reliant, and adaptable
	31	7-E*			
	32	7-F	62	7-V	Other (Personal Development and Enrichment Goals)
	33	7-F*	63	7-V*	Other (Personal Development and Enrichment Goals)
	34	7-G			
	35	7-G*	64	8	Most Important goal
	36	7-H	65	8	Second Most Important goal
	37	7-H*	66	8	Third Most Important goal
	38	7-I	67	9	Ultimate degree sought while attending our college
			68-71	10	Major or area of study
	39	7-I*	72	11a	Was our college your first choice?
			73	11b	If no, what kind of college was your first choice?
	40	7-J	74	12	When you left our college, what was your overall grade point average (GPA)?
	41	7-J*			
	42	7-K	75	13	Primary enrollment status while attending our college
	43	7-K*	76	14	When you were enrolled, how many hours did you normally work when classes were being held?
	44	7-L	77	15	Did you apply for financial assistance (loan or scholarship) while at our college?

Note: Asterisk identifies responses concerning whether or not respondent feels they are achieving or have achieved the goal.

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

Columns	Item Number	Description	Columns	Item Number	Description
	19	Student ID number	27	18	Admissions
	10	Card number - 2	38	18	Registration
	11	16 A Achieved my academic goals	39	18	Business office
	12	16 B Transferred to another college	40	18	Academic advising
	13	16 C Needed a break from college	41	18	Guidance, counseling and testing
	14	16 D Courses programs I wanted were not available	42	18	Reading, writing, math and study skills improvement
	15	16 E Dissatisfied with my academic performance	43	18	Learning
	16	16 F Dissatisfied with the quality of instruction	44	18	Student affairs
	17	16 G Dissatisfied with the college environment	45	18	College cultural programs
	18	16 H Dissatisfied with the work life balance	46	18	Recruitment and athletic programs
	19	16 I Dissatisfied with the quality of campus services	47	18	Financial aid
	20	16 J Dissatisfied with the quality of campus facilities	48	18	Student employment
	21	16 K Dissatisfied with the quality of campus recreation	49	18	Career planning
	22	16 L Dissatisfied with the quality of campus dining services	50	18	Employment
	23	16 M Dissatisfied with the quality of campus health services	51	18	Housing services
	24	16 N Dissatisfied with the quality of campus child care	52	18	Cafeteria
	25	16 O Dissatisfied with the quality of campus book store	53	18	Health services
	26	16 P Dissatisfied with the quality of campus parking	54	18	Library
	27	16 Q Dissatisfied with the quality of campus computer services	55	18	Child care
	28	16 R Dissatisfied with the quality of campus recreation	56	18	Book store
	29	16 S Dissatisfied with the quality of campus dining services	57	18	Parking
	30	16 T Dissatisfied with the quality of campus health services	58	18	Computer services
	31	16 U Dissatisfied with the quality of campus child care	59	18	Other
	32	16 V Dissatisfied with the quality of campus book store	60	18	Do you currently have plans for additional education?
	33	16 W Dissatisfied with the quality of campus parking	61	18	If you included responses 2 or 3 please write in the name of the college you plan to attend or are attending
	34	17 Additional question 1	62	19	Additional question 1
	35	17 Additional question 2	63	19	Additional question 2
	36	17 Additional question 3	64	19	Additional question 3
	37	17 Additional question 4	65	19	Additional question 4
	38	17 Additional question 5	66	19	Additional question 5
	39	17 Additional question 6	67	19	Additional question 6
	40	17 Additional question 7	68	19	Additional question 7
	41	17 Additional question 8	69	19	Additional question 8
	42	17 Additional question 9	70	19	Additional question 9
	43	17 Additional question 10	71	19	Additional question 10
	44	17 Additional question 11	72	19	Additional question 11
	45	17 Additional question 12	73	19	Additional question 12
	46	17 Additional question 13	74	19	Additional question 13
	47	17 Additional question 14	75	19	Additional question 14
	48	17 Additional question 15	76	19	Additional question 15

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

Item Columns Number	Description	Item Columns Number	Description	
9	Student ID number	4	17	To become actively involved in student life and campus activities
10	Card number 1	8	73A	To increase participation in cultural and social events
11	1	9	73B	To increase participation in cultural and social events
12	2	11	73C	To meet people
13	3	12	73D	To meet people
14	4	13	73E	Other Social and Cultural Participation Goals
15	5.0	14	73F	Other Social and Cultural Participation Goals
16	5.1	15	73G	To increase self-confidence
17	5.2	16	73H	To increase self-confidence
18	5.3	17	73I	To improve leadership skills
19	5.4	18	73J	To improve leadership skills
20	5.5	19	73K	To improve ability to get along with others
21	6	20	73L	To improve ability to get along with others
22	7A	21	73M	To learn skills that will enrich my daily life
23	7.1	22	73N	To learn skills that will enrich my daily life
24	7.2	23	73O	To develop ability to be independent, self-reliant, and adaptable
25	7.3	24	73P	To develop ability to be independent, self-reliant, and adaptable
26	7.4	25	73Q	Other Personal Development and Improvement Goals
27	7.5	26	73R	Other Personal Development and Improvement Goals
28	7.6	27	73S	Most Important goal
29	7.7	28	73T	Second Most Important goal
30	7.8	29	73U	Third Most Important goal
31	7.9	30	73V	Most important faculty achievement
32	7.10	31	73W	Most important faculty
33	7.11	32	73X	To improve academic knowledge, skills, and/or competencies
34	7.12	33	73Y	To improve academic knowledge, skills, and/or competencies
35	7.13	34	73Z	To increase chances for future and/or promotion
36	7.14	35	74	To increase chances for future and/or promotion
37	7.15	36	75	Since completing program at college, have you enrolled at another college?
38	7.16	37	76	Advise kind of collaboration or treatment after completing program at our college?
39	7.17	38	77	Advise other degrees sought at the college related to completion of
40	7.18	39	78	Most important of study

Note: Asterisks identify responses concerning well-being or requirements for the course, but not those related to the goal.

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

Columns	Item Number	Description
1-9		Student ID number
10		Card number - 2
11	17	How well did college prepare you for your additional college work?
12	18	Did you transfer any credits from our college toward your additional college work?
13	19	Are you currently employed?
14-15	20-21	Category of current job
16	21	After completion of program at college, how long did you look for work before obtaining your first job?
17	22	How did you find your first job?
18	23	How well does your college prepare you for your first job?
19	24	What is was your annual salary or wages in your first job?
20	25	To what extent is was your first job related to your major or area of study at our college?
21	26	If you currently are not employed or are not working, is a job related to your major or area of study at our college which of the following applies?
22	27	Would you be willing to move to another community to work in a job related to your major or area of study?
23	28	Additional question - 1
24	29	Additional question - 2
25	30	Additional question - 3
26	31	Additional question - 4
27	32	Additional question - 5
28	33	Additional question - 6
29	34	Additional question - 7
30	35	Additional question - 8
31	36	Additional question - 9
32	37	Additional question - 10
33	38	Additional question - 11
34	39	Additional question - 12
35	40	Additional question - 13
36	41	Additional question - 14
37	42	Additional question - 15

Additional Questions Section

SOIS ORDER FORM

Please send me the following SOIS materials:

Questionnaires—\$10/hundred or 10¢ each

2-year series 4-year series

QUANTITY TITLE

_____ Entering-Student Questionnaire
 _____ Continuing-Student Questionnaire
 _____ Program-Completer and Graduating
 Student Questionnaire
 _____ Former-Student Questionnaire
 _____ Recent-Alumni Questionnaire

Handbook: \$7/copy

_____ *Student Outcomes Questionnaires:
 An Implementation Handbook*

_____ **TOTAL**

Send materials to:

Name _____

Title _____

Department _____

Institution _____

Address _____

City _____ State _____ Zip _____

Payment Enclosed
(Please make checks payable to NCHEMS)

Charge Institutional Purchase Order

No. _____
(Enclose purchase order with this form)

To order, fill out applicable sections and mail form to:
 NCHEMS Publications Dept. • P.O. Drawer P • Boulder, Colorado 80302

SOIS ORDER FORM

Please send me the following SOIS materials:

Questionnaires—\$10/hundred or 10¢ each

2-year series 4-year series

QUANTITY TITLE

_____ Entering-Student Questionnaire
 _____ Continuing-Student Questionnaire
 _____ Program-Completer and Graduating
 Student Questionnaire
 _____ Former-Student Questionnaire
 _____ Recent-Alumni Questionnaire

Handbook: \$7/copy

_____ *Student Outcomes Questionnaires:
 An Implementation Handbook*

_____ **TOTAL**

Send materials to:

Name _____

Title _____

Department _____

Institution _____

Address _____

City _____ State _____ Zip _____

Payment Enclosed
(Please make checks payable to NCHEMS)

Charge Institutional Purchase Order

No. _____
(Enclose purchase order with this form)

To order, fill out applicable sections and mail form to:
 NCHEMS Publications Dept. • P.O. Drawer P • Boulder, Colorado 80302