DOCUMENT RESUME

ED 138 129

HE 008 729

AUTHOR TITLE

Carlson, Mary S., Ed.; Berlet, Chip, Ed. The Options Handbook. Communicating with Prospective Students about Postsecondary Educational Options.

Handbook One: Information Needed by the Student

Consumer.

INSTITUTION

National Student Educational Fund, Washington,

D.C.

PUB DATE

76

NOTE .

51p.: For related document, see HE 008 730; Some

tables may be marginally legible

AVAILABLE FROM

National Student Education Fund, Suite 305, 2000 P

St., N.W., Washington, D.C. 20036 (\$5.50)

EDRS PRICE DESCRIPTORS

MF-\$0.83 HC-\$3.50 Plus Postage. Admissions Counselors: College Admission: College Bound Students; *College Choice: College Preparation: *Consumer Protection; *Decision Making; Delivery Systems: *Higher Education: Information Dissemination: *Information Needs; Information

Networks; Information Services; Objectives;

Students

ABSTRACT

The consumer protection movement in higher education began in about 1972. Layton Olson describes the background of this movement including the long- and short-run forces behind it and what the movement means to students. Disclosure of complete and accurate information to prospective students is the next step in consumer protection. This is discussed by Seth Brunner in terms of what it means to many kinds of students and prospective students; and what information students and their families need. Information as a factor in decisionmaking by prospective students is discussed by Nancy Greenberg to answer questions regarding why prospective students receive an increase in communications but not an increase in useful information from educational institutions; how better information can help the development of personal strategies for making educational decisions; and the persons who are the most influential sources of information for prospective students. Steve Williamson outlines information currently collected and its potential use by students, including the cost of information, what information could be made available to students, what information should be collected, and how the information could be delivered to students. (JMF)

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THE Options Handbook

COMMUNICATING WITH PROSPECTIVE STUDENTS ABOUT POSTSECONDARY EDUCATIONAL OPTIONS

HANDOOK ONE:

INFORMATION NEEDED
BY THE STUDENT CONSUMER

EDITED BY:

Mary S. Carlson with Chip Berlet

THE NATIONAL STUDENT EDUCATIONAL FUND

Acknowledgments

This report is one of a series of Options Handbooks published by the National Student Educational Fund under a grant from the Fund for the Improvement of Postsecondary Education (FIPSE). The views expressed are those of the authors and the National Student Educational Fund as part of a continuing effort to analyze higher education policy from a student perspective.

We would like to thank the following persons for their assistance with this ser-

ies of publications.

- Stuart Edelstein, for his advice and support which were gratefully appreciated.
- Harold Hodgkinson, for his thoughtful comments in the early stages of preparation, prior to his appointment as director of NIE.
- Carol Stoel, David Justice and others at the Fund for the Improvement of Postsecondary Education, for recognizing the importance of information for students.
- Jane Lichtman, Dick Johnston, Paul Olson, Stuart Sandow and other members of our Advisory Committee for providing comments on the design of the project and on the summary and recommendations.
- Willis Edwards, Fred Erickson, Ryan Leary and David Rosen, for their help particularly at the beginning.
- And to the many hundreds of persons in the postsecondary education community who have engaged in dialogue with students about these issues.

Design and production by Chip Berlet.

Composition and typesetting by N. Matthew Richardson

Additional typesetting by Jeanne Mackey. Cover photo taken at Georgetown University by Chip Berlet. Thanks to Skip Roberts and Karen Moyer for their tolerance. Printed at CLB Law Publishers and Catterton Printing. Production assistance from USNSA, Kober Productions, Unicorn Times and Bloated Toad Graphics. Proofreading, additional research and assorted amenities from Karon Cox, Jo Cox and Layton Olson. Moral support from Lucy Miller, Kathleen Brouder and the folks at NEXUS.

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Introduction

This book describes a queet, but important, revolution in postsecondary education which started about 1972. This revolution is concerned with "consumer protection" and, for students, its most important milestones so far have been the establishment by the Federal government of:

- 1. The *right* of a student to a Basic Educational Opportunity Grant of between \$200 and \$1400 based not on the discretion of an educational institution, but solely on an individual's financial need;
- 2. the *right* of a student to access to his or her educational records:
- 3. the *right* of a student to protection as a subject of educational research;
- 4. the right of a student to a refund of tuition and fees from an institution upon withdrawal from that institution;
- 5. the right of every prospective student to full disclosure from a postsecondary institution of "complete and accurate" information about its programs, fafulties and facilities and previous students outcomes,

The first chapter begins by describing where this revolution came from and where it is leading postsecondary education. It tells the story of how the Federal government's emergency efforts in 1974 and 1975 to stem the tide of defaults on student loans have brought the issues of consumer protection in the \$40 billion per year post-secondary education industry to the direct attention of Federal and state legislators and education agency persons.

The first chapter then outlines the questions addressed in the other chapters of the handbook. These chapters focus on the role of information in protecting the student consumer of postsecondary education. The questions addressed in the first chapter are as follows:

- 1. What are the short run and long run forces which have brought about the consumer protection revolution?
- Who are the "interested parties" in the continuing debate over consumer protection (including a scorecard of the players in the consumer protection field, and what they are doing)?
- 3. What does consumer protection in postsecondary education mean to students?
- 4. What is the Student Information Bill of Rights and how does it point the way to the future of a consumer-based analysis of postsecondary education?
- 5. Why is there consensus that discussive of complete and accurate information to prospective students is the next step in consumer protection?

Chapter two, What Students Need to Know About Colleges, addresses the questions:

- 1. What exactly does complete and accurate information mean for the many kinds of students and prospective students?
- 2. What information do students, prospective students and their families need? What are the five major questions which students ask about postsecondary educational experiences?

Chapter three. Information as a Factor in Decision-Making by Prospective Students. addresses the questions:

1. Why are prospective students receiving an increase in communications from educational institutions, but not an increase in useful information?



- How can better information help persons to gain control over their lives through development of personal strategies for making educational decisions, such as what education to pursue, when, how and at what cost?
- 3. Who are the persons who are the most influential sources of information for prospective studings.

Chapter four Information Currently Collected attents.
Potential Use By Students, addresses the questions.

1. How much does information cost for students, for postsecondary educational institutions, and for governmental agencies? What information is now collected which could be made available to students? What information is not now collected, but is needed by prospective students? How can information and counseling services be delivered into the hands of prospective students in useful forms? What agencies collect and deliver information now, and what are their main purposes in doing so?

Consumer Protection in Postsecondary Education

This chapter describes the forces which have focused public attention on consumer protection in postsecondary education. It suggests that the full disclosure of complete and accurate information by institutions, and government and private agencies about postsecondary education and training is the next major step in protecting the educational consumer. A student information Bill of Rights is also presented. These rights provide a framework for a complete system of information and professional advising services designed for, and answerable to, students, prospective students, and their families. The chapter emphasizes establishing rights to specific information and advising services as a necessary complement to establishing rights to financial resources and meaningful educational programs.

Development of // Consumer Protection

WHAT TRIGGERED THIS CONSUMER PROTECTION MOVEMENT?

In the last three years the concept of consumer protection in postsecondary education has been discussed by a wide range of individuals including:

Policy makers (especially at the federal level); Educational program administrators; Researchers and planners; Persons in educational institutions and educational associations; Regulators from private, state and federal accrediting bodies;

Persons in student and consumer interest organizations;

The general public has become aware of educational consumer protection problems through media coverage of school closings, loan defaults, degree mills, increasing tuition and other costs, and job scarcity for graduates.

Three Short Term Forces

Three short term forces are responsible for much of this increased attention to consumer problems:

- 1. The drop-off in enrollment from its peak in the 1960's. Because of the decline in the birth rate and an unstable job market, the number of persons in the traditional college age population has decreased, and the percentage of that population going directly to college after high school has receded slightly in the early 1970's. Most projections say the number of 18-year old persons will not significantly turn upward until at least 1990. The current downturn in the economy, the increased demand in health and law enforcement fields and increases in the part-time attendance by older students, are credited by many with temporarily keeping enrollments from a decline in absolute numbers. In all, however, the situation means increasing competition among institutions for students.
- 2. The increasing use and abuse of advertising and recruiting in postsecondary education by profit making and non-profit public and private colleges. Advertising on television, in buse's, and on match books promise's a



college-level salary without four years of college. This is deceptive. Most persons who enroll do not finish the course and jobs are seldom readily available for graduates. Many non-profit colleges have increased their advertising and recruiting budgets substantially in the past few years, leading to similar abuses. Many private institutions now average between \$500 and \$1000 in expenses for advertising and the recruitment and admission of each incoming freshman; and public institutions are not far behind.

Many students enroll after taking out federally-guaranteed student loans. In most instances the loan forms are filled out in the financial aid office with the help of the financial aid officer, or in the home with the help of a salesperson. Often loan agreements are signed without a complete understanding that a loan—as opposed to a grant or a tuition deferral—is actually being made. Since this loan is often the first major financial transaction of a student's life, the student often fails to completely understand the rights and obligations in the repayment of the loan. This is particularly true if the course is not completed, since repayment does not begin until nine months after a person leaves school.

The non-completion rate in both profit-making and nonprofit schools is often between 40 and 80%, leaving many students with obligations to pay for an education they never actually received.

3. The dramatic increases in the payment of default insurance claims under the federal Guaranteed Student Loan Program. The GSLP, which began in the late 1960's, is now guaranteeing over \$1.5 billion in new student loans to over 1 million students each year. Insurance claims paid on defaults, death and disability, and bankruptcies by the U.S. Treasury to state loan agencies, private banks, and educational institutions have increased from \$47 million in 1973 to \$202 million appropriated by Congress for 1976. And, these figures are expected to increase substantially. The percentage of students defaulting has also dramatically increased in both the GSLP, and the National Direct Student Loan Program.

Although the exact percentages are in dispute, in 1974 the U.S. Office of Education estimated that "48 percent of loans in the proprietary sector (for-profit vocational schools) will end up in default. That compares with a predicted 12 percent in four-year colleges and universities (both public and private), 36 percent in public community colleges and 24 percent in public vocational schools" (Van Dyne, 1975, p.1).

Loan Defaults: The Major Impetus

Enrollments have fluctuated before, and there have been other instances of advertising and recruiting abuses involving federal student assistance. Until recently, however, the problems had low visibility because only in the past three years has the Guaranteed Student Loan Program matured to the point where a large percentage of loans are in repayment status. Only when students have had to pay back the loans have the problems of poorlymade loans emerged. The problems of drop-out percentages and student satisfaction with their educational ex-

perience take on much more importance in the Guaranteed Student Loan Program than with the G.I. Bill Program because when a student leaves school under the G.I. Bill the payments from the U.S. Treasury stop unless there is administrative delay or collusion between the student and the institution in not notifying the V.A. Thus, the financial losses, without regard to their cause, were automatically limited in their impact on the student and on the federal government.

There were scandals involving the G.I. Educational Bill of Rights in the years after World War Two when tuitions were increased and wholesale recruitment took place. These problems continue at a moderate level to the current time. (See Harold Orlans, Jean Levin, Elizabeth Bauer, George Arnstein, Private Accreditation and Public Eligibility, 1975.)

With Guaranteed Student Loans, however, the student has liability even if he or she withdraws from school. The federal government can clearly see that the system isn't working. The fact that a very high 77% of the defaulting borrowers in public colleges and 37% of the defaulting borrowers in for-profit vocational schools (U.S. Office of Education, 1974. p. III-23), have never made even one payment makes it clear that many of the loans were poorly made, and often were never meant to be collected by the institution or bank in the first place, except through federal loan insurance.

• Three Long Term Forces

There are other trends increasing the awareness of educational consumerism and consumer protection. Consumerism is one analytical framework governments use to get an overall picture of what they are spending money for the impact or usefulness of a program, and the most efficient way to manage complex administrative systems. The are three long-term forces involving governmental accounts but which have an impact on the problems of analytic federal student financial assistance, and thus, on the protection.

- 1. There has been strong interest at the federal level, and increasingly at the state level, in building a sindent financial aid market system in order to have students vote with their feet, and with student financial aid and tuition dollars. Many legislators feel that some decisions are not appropriately made directly by Congress or by the Executive Branch. They feel a student financial aid marketplace is the best method to guarantee access to postsecondary education. In such a marketplace, a heavier teliance is placed on students and their families to make the decisions on what kind of institutions to support, or in which to enroll.
- 2. Higher education becomes postsecondary education. Public and private higher education, community colleges, continuing education, public vocational and technical education, proprietary, business, technical and correspondence education have been merged for many planning and



decision-making purposes into "postsecondary education". Many persons are viewing government aubsidized job training and manpower programs as another component of "the system." Rational decision-making by an increasingly diverse and expanding pool of students can only be achieved through a massive increase in the available information resources to allow persons to understand their options and make their own choices. Policy-makers and planners are now recognizing that a consumerism analysis is now necessary for understanding, planning, and utilizing the postsecondary educational system.

The college sector (two- and four-year, public and private non-profit degree granting institutions) has grown in undergraduate enrollment from 1.05 million (or, 11.9% of 18-21 aged population) in 1930 to 6.84 million (or 47.6% of 18-21 aged population) in 1970 (Carnegie Foundation for the Advancement of Teaching, 1975, p. 27). The proprietary and non-college postsecondary education sector has also expanded (Carp et al. 1973.)

Postsecondary education is often the second biggest single consumer investmenta family will make in a lifetime. \$35 billion per year is paid into institutions by government private donors, students, and their families. This does not include outside living expenses or deferred income. It is clear that postsecondary education decisions are being made without the full complement of public and private information sources that accompany similar investment in life insurance, retirement plans, automobiles and houses.

3. Increase in concern at all levels of government about fiscal accountability in the expenditure of public funds, particularly for rapidly expanding programs. The governmental costs of postsecondary education and student financial aid have grown even faster than enrollments. The final report of the National Task Force on Student Aid Problems described the staggering growth in the student aid system:

In 1955-56, the total amount of financial assistance available to students in postsecondary institutions was estimated to be around \$96 million. By T974-75, this amount had grown to nearly \$6.4 billion, or an incredible growth of 66 times in 19 years. That such an enormous growth could have occurred as it did with as few problems as it has is amazing. Nevertheless, the problems of student aid are many and significant, as well as vexing and troublesome for students, parents, program administrators, and policy makers. They are increasingly becoming troublesome to the general public. (National Task Force... 1975)

The capacities of accountants and planners to gather information and locate problem areas has increased tremendously in the past 10 years. Thus, policy makers, armed with expanding information and analysis, are forced to deal with complex problems which they could ignore before, and are demanding that educational administrators develop systems which can keep the magnitude of the problems within a manageable range, both in terms of total dollars and in terms of letters from constituents.

The Game and Its Players

WHAT IS CONSUMER PROTECTION IN POSTSECONDARY EDUCATION?

Consumer Protection in postsecondary education is regulation of educational or training services, or activities and transactions affecting individuals who might enter into an agreement for such services.

The regulation can be carried out by the federal or state government either through educational or commercial regulation or licensing agencies; through private accrediting or approval bodies which certify standards for institutional or program quality; or by private organizations or individuals including prospective students and their families.

Regulations can define rights and obligations affecting educational activities or services, between a student or potential student and an educational or information service or institution, a governmental agency or official, or a private agency or organization.

Regulations can cover educational activities or services, including:

Regulation of information, advertising, or recruiting about educational activities, such as requirements of disclosure by institutions of complete and accurate information about their programs, facilities, faculties, and outcomes of former students;

Setting standards for advertising;

Setting governmental responsibility for communication of information about comparable educational activities:

Regulation of sales, financial or admission transactions, such as requiring bonding of salespersons, requiring standard entrance provisions, such as regulating the spending of financial aid or requiring tuition refunds;

Regulation of institutions or services through legislative or constitutional standards by state agencies or ordered by peer review group of similar institutions or programs;

Begulation of auxiliary services which affect choices of educational services, such as testing, counseling, information, educational materials, publishers, and mass media.

As can be seen, the definition of consumer protections through regulation is very large. Many persons have begun to talk about partial definitions based on their specific responsibilities or perspectives. The overall definition of consumer protection will evolve in the coming years based on the need for a consumer protection analysis to help explain and solve specific problems and processes.



WHO IS INTERESTED IN CONSUMER PROTECTION IN POSTSECONDARY EDUCATION?

The question "Who's interested?" is important because the phrases "consumer in postsecondary education," "consumerism," and "consumer protection" have come into wide usage only in recent years. As one Congressional staff person said, "Consumer protection was definitely not an issue in the consideration of the 1972 Education Amendments, but it has already become a substantial issue in 1975 as Congress faces the extension of post-secondary education legislation for four more years from 1976 until 1980." (Andringa, 1975)

One Priority In Common: Disclosure of Accurate Information

This section will make clear that for many different reasons the provision of complete and accurate information to prospective students is the most important, and perhaps the only, consumer protection strategy with which most of the players can agree.

This belief increased greatly during the debate over the implementation of full disclosure provisions in the Guaranteed Student Loan Regulations, and in the proposed Federal Trade Commission Regulations for profit-making postsecondary vocational and home study institutions. (Many persons prefer providing information rather than direct intervention by the federal government.)

Since consumer protection in its current form is a relatively new ballgame, other players with other needs and definitions may be getting into the act in coming years.

In addition, consumer protection means many different things to different people. Listed below is a "scorecard" of the players in postsecondary educational consumerism along with why they are in the field.

Federal and state decision makers and their staffs are interested in consumer protection because of: pressures arising from increases in defaults under the Guaranteed Student Loan Program and the National Direct Student Loan Program; newspaper articles detailing abuses of student financial aid money; letters from students who have been caught up in loan defaults of an institution's closing; and the reconsideration of major student assistance legislation between 1974 and 1975.

rederal, state and private program programs and planners are interested due to the above teasons but also because of the necessity to design a coordinated administrative system between federal, state, institutional, and private agencies to deliver information and process student financial assistance applications by students from a broader universe of postsecond by educational institutions. (5900 institutions are now participating in the Guaranteed Student Loan Program).

They are also interested because they are under pressure from decision makers to develop measures of the impact (U.S. Office of Education 1975.) of student financial aid and postsecondary educational experiences. They are being asked to develop mechanisms to deliver infor-

mation to students and potential students, and to audit the spending of financial assistance at institutions.

Regulators, from federal and state agencies and private accrediting bodies, are interested in controlling advertising claims and sales transactions covering educational services; and in monitoring fiscal practices of institutions in order to insure that federal and state funds are being properly spent. This is particularly important when dropout and transfer rates at many public and proprietary instutions are over 50%. Regulators are also interested in developing a system which can coordinate the collection of educational complaints as an early warning information system for program managers who need information about problems before they reach major proportions.

Researchers are interested, because they are beginning to redesign the collection of data about educational activities in order to focus more on the motivations of students and potential students. The motivations and behaviors of institutions, and governmental agencies are much better known. Researchers are examining a wider range of educational options after high school including two year or four year collegiate education, non-collegiate education or manpower training, as well as options for older students, transfer students, handicapped students, persons in prison, and others. Researchers are focusing on students and potential students as active rather than externally controlled decision-makers. Resegrehers are concerned with designing standards which can aid persons to develop occupational and life survival skills rather than standards aimed at testing current aptitudes or skills.

Student services agencies are interested because they sell something to students or potential students (for example, testing and financial aid services, other information and legal services). The student services sector is a rapidly expanding field. However, its involvement with the consumer protection debate has been minimal to date except where such services are closely connected with governmental regulations.

In one area which has been more closely regulated in the past few years, the two major non-profit groups, the American College Testing Program and the College Entrance Examination Board/College Scholarship Service, are only now beginning to separate the *student* services involved in testing and financial aid needs analysis, from the *institutional* services needed by the admissions and financial aid officers. Career and educational guidance columns and articles appearing in wide circulation newspapers and magazines are also a recent phenomena.

Ten years ago, non-profit service agencies were almost the only groups active in the admissions, financial aid and career guidance field. Today, however, they have competition from information services designed by profit making companies and paid for by students and their families. For example, two new groups will supply computer printouts of a minimum of five to ten financial assistance leads. In addition, there are more than a dozen commercial guidebooks for tests, admissions and how to find financial aid.

Many new student services are based on advertising by colleges or companies interested in a particular student market. For example, 400,000 copies of a guide to fouryear colleges is distributed free to graduating 2-year col-

C

lege students through counseling offices at 1500 campuses. Between four and six million high school students receive surveys and questionnaires which allow both students and institutions to select, decruit, or receive information about each other.

Institutional administrators and boards of trustees are interested because they are concerned about the growing regulation of institutional activities, including affirmative action in hiring and treatment of students, record keeping, public disclosure of information, government-mandated admissions, refund, and financial aid policies. They see regulation as an intrusion into institutional autonomy which often involves costly administrative mechanisms. Institutions are concerned that federal and state governments are creating a regulated student financial aid marketplace which will force responsiveness to societal and student purposes without being balanced against other institutional purposes. The level of federal regulation has increased to the point that in June, 1975 the Federal Bar Association and the Bureau of National Affairs held a conference on federal regulation of postsecondary education called the National Briefing Conference on Students. Rights and Institutional Responsibilities-What Price Federal Aid? This conference was the first of an annual series involving attorneys representing institutions, students and governmental agencies.

Students and potential students from a wide range of backgrounds are interested, because they want institutions to assist them in acquiring an education and a job. They also want the government to assist them in financing their education and to provide accurate information to help their decision-making. Students want the government to regulate transactions such as admissions, sales, transfer, dropout, loans and refunds. Student groups at the gampus, state and national levels are interested becayse they represent student concerns to educational consumer protection policy makers. Student groups also are engaged in popularizing the concept of educational consumer protection with students and prospective students. Student groups are concerned because they will be involved with campus task forces on educational complaints, institutional disclosure and other consumer protection issues.

Parents and families are interested because the options of high school age persons are increasing dramatically. Students and families must choose from many education, training and work options with complex financing and echeduling patterns. Parents are looking to institutions, government, and informational services to assist them in clarifying educational and financial aid options. More parents are potential students themselves. A higher percentage of college students are now older, returning or part-time students and parents involved in job training, or other formalized instruction.

Faculty and counselors in high school, postsecondary education, employment situations, and community agencies are interested because they need more information to help persons make plans. Faculty and counselors in their roles as travel agents for postsecondary education look to the government; postsecondary educational institutions, and private agencies to provide them and their students with information.

A NEW TERMINOLOGY FOR OLD PROBLEMS

"Consumer protection" and consumerism in postsecondary education is the language of regulators, planners, lawyers, politicians, and activists like Ralph Nader, which is applied by analogy from other fields such as the automobile industry, food industry; and consumer goods industries. Students often don't identify educational services with consumer services since educational services have usually been public non-profit services, not so much consumed as participated in. Much of the regulatory language comes from attempts to control advertising, financial transactions, and quality of service provided by private profit-making schools, such as business, secretarial, trade, technical, and correspondence schools. A few years ago, however, the regulators and planners began to apply the same language to traditional higher education.

When we have asked students "What does consumer protection in postsecondary education mean to you?" they respond with quizzical stares, long pauses and tentative questions. There are a few answers such as "students rights," "guarantee of quality of education," "information about what will really happen to me in school," "help from the government if I get ripped off," and "something that Ralph Nader does."

To most students there is very little substance to the consumer protection movement in education, often because students have a difficult time visualizing themselves as consumers or sharing that role with other students regardless of their differences in type of institution attended, socio-economic backgrounds, and purposes for being in postsecondary education.

Consumers purchase products or services. Many students are not aware of their status as consumers because their families bear most of the financial burden. However, awareness is growing rapidly. The age of students is getting older. Over 50% of persons in college work during the school year or the summer, a percentage which has grown in the past 20 years. More families are being forced to apply for financial aid; 55% of entering freshmen ap: plied for financial aid in 1974 as opposed to 45% 5 years ago. Families are increasingly unable to contribute the amount of money towards their children's education that governmental and private need analysis services calcu-Jate they should contribute. A recent study in Illinois. (Fenske, 1975.) showed that in the past 5 years the cost crunch has widened the gap between what families actually contribute and what they are supposed to contribute. Between 1967-68 parental support amounted to 60% of the expected family contribution while in 1973-74 it fell to 39%, a staggering 21% drop, made up for mainly by student-held part-time jobs during the academic year. (Chronicle of Higher Education, 1975, p 6.)

Because of the crunch in paying for college, there is an increase in communication between students and parents about financial problems; and an increase in the use of consumer analogies throughout the society. These changes are expected to bring a higher student and parent awareness of their consumer status.

An article in the Chronicle of Higher Education June 9, 1975 summarizing student activity during 1974-75 is titled "Student Protest, 1975: Stress on Economic Issues, Threatened Tuition Increases, Elimination of Programs,



Faculty Layoffs Spark Demonstrations; Militant Minority Students See Gains Eroding." The article stated that there were more student demonstrations in 1974-75 than any year since the demonstrations of 1971 over the Indochina War. The "issue that moves students now, is the financial troubles of their colleges. It affects them more directly than the war but is less emotionally or politically charged."

What Students Are Doing

CONSUMER PROTECTION

While students have not translated consumer protection into their everyday jargon, they have traditionally conducted consumer oriented projects concerned with education. For example, students have:

- set up and administered course and teacher evaluations;
- published survival manuals about their education;
- designed their own courses and independent studies;
- · established free universities;
- engaged in educational reform;
- participated in curriculum and institutional goals committees:
- engaged in negotiations and demonstrations over the quality and style of education, admissions standards, and costs and financial assistance;
- handled complaints and don ersonal and academic advising through switchboards, complaint and crisis centers, minority and other student centers;
- •engaged in demonstrations about their personal draft status and foreign policy during the Indochina War;
- hired attorneys to handle both educational complaints about services of businesses, agencies and landlords, as well as with the services of their educational institutions;
- established and run student services such as book stores, student unions, travel and entertainment services, child care centers, bicycle stores, and bus lines; • engaged in legislative and administrative lobbying activities affecting institutional budgets, tuitions and fees, student financial aid, student housing, child care and health services, taxation in student book stores, age of majority and alcoholic beverages on campuse's, student wages, and collective bargaining.

Recently, students have engaged in projects focusing on implementing affirmative action plans to cut down discrimination by race or sex in admissions, sports, hiring, and campus services.

Students have also engaged in consumer research and advocacy in public interest research groups and similar organizations. Currently, there are Nader-related PIRG's officially-listed on 135 campuses in 19 states involving more than 500,000 members with aggregate operating funds in excess of \$1 million per year. Although PIRG's focus on environmental and consumer issues which do not necessarily affect students as students, many PIRG's do handle student complaints about their own institution as well. In:1973, the Project on Educational Testing spon-

sored by the Youth Project, National Student Association, PIRG's in three states, and others issued an interim report on the impact of standardized tests and the Educational Testing Service. In the Fall of 1975 New York PIRG launched an Educational Testing Service Complaint Center because of the enormous impact of testing on educational and career opportunities.

Students have engaged in consumer projects for years based on their departmental major. This has been especially true in fields such as home economics, agriculture, sciences, business and practical economics. Many student groups have organized campus chapters of groups, concerned with the career they are preparing for. Such groups are often student divisions of professional organizations such as the Student National Education Association.

Consumer Protection on Campus

There is no common structure or process for student consumer protection at various campuses. The government, however, has begun to formalize the meaning, structure and process of consumer protection in post-secondary education. Initially, consumer protection will focus on the redress of financial transaction grievances, such as refunds, financial aid, loans, or school closings. The near step will be the right to disclosure of files and the procedures for defining and implementing disclosure of information and setting up disclosure offices on campus. A third major step will be the establishment and recognition by the federal and state governments of complaint mechanisms on campuses coordinated with state and federal consumer protection offices.

The disclosure documents issued by institutions, governmental agencies, accrediting bodies, and student groups, along with campus complaint or redress procedures will come to represent what consumer issues mean to students. Much as with the term affirmative action, the process and structure visible at the campus level will begin to define the term consumer protection.

Consumer Protection In Student-Based Research

What consumer protection means to students must also be seen in terms of what students are trying to achieve by education after high school. Timothy Engen and Daniel Crippen's Survey of Student Response (National Commission on the Financing of Postsecondary Education, 1973) clearly delineates the major student purposes in postsecondary education: (1) self development, in personal terms and in attempts to better society, and (2) develop employability security in career or job field (See also Yankelovich, New Morality: A Profile of American Youth in the 1970's; Astin, et al, American Freshman National Norms for Fall 1974; National Center for Educational Statistics, National Longitudinal Study of High Sahbol Class of 1972; Hoyt, Consumer Protection in Post-feeondary Occupational Education, for discussions of

measurements of student purposes, satisfactions, and other outcomes.)

Student representatives have begun to take part in defining consumer protection from the students' viewpoint by participating in a number of activities.

- 1. A student survey of 22,000 students and 300 student representatives was conducted by the student board member on the National Commission on the Financing of Post-secondary Education, which was established by the Education Amendments of 1972 to determine the costs and the information bases of various types of postsecondary educational options. The student survey initiated regional meetings between student groups representing a cross-section of college students and students in non-college vocational and technical schools.
- 2. Students participated on the planning committee for, and as participants in, the first and second national Conferences on Consumer Protection in Postsecondary Education (1973-74) in Denver and Knoxville.
- 3. Students developed the Student Information Gap Project financed by the Fund for the Improvement of Postsecondary Education to identify the specific information on postsecondary education that students feel they need; and to investigate postsecondary educational information issues from a student perspective. The project is part of FIPSE's comprehensive information and counseling strategy to develop Better Information for Student Choice in the postsecondary educational marketplace.
- 4. Students have participated in the clarification of the Federal Guaranteed Student Loan Program (Federal Register, February 20, 1975. p. 2596) regulations and the proposed Federal Trade Commission regulations covering college and non-college institutions, particularly sections providing for information disclosure. (Federal Register, May 15, 1975). The formal process began with the issuance of proposed GSL regulations in October, 1974, followed by testimony by students and institutional representatives. Final regulations became effective April 1975, and now regulate approximately 5900 of the 8800 institutions eligible to participation in the Guaranteed Student Loan Program.
- 5. Student representatives have participated in conferences and task forces on institutional eligibility for student financial aid programs, held in April-May 1975 by the Institute for Educational Leadership and the Office of Education's Accreditation and Institutional Eligibility Staff. Participants in these meetings have reached consensus on the need for disclosure of complete and accurate information to prospective students.
- 6. Student representatives have participated with the Federal Interagency Committee on Education, and its Consumer Protection Subcommittee, in the development of a coordinated nationwide clearinghouse of complaints involving federal and state agencies, campuses, and other sources of complaints. Students stressed the need for integrating local campus and community-based complaint centers into all complaint systems.

- 7. Students have participated in the national conference on Student Rights and Institutional Responsibilities sponsored by the Federal Bar Association and Bureau of National Affairs. This was the first conference in the growing field of federal and state regulation of the student/institution relationship. Concern for regulation is engendered by expenditures of over \$6 billion per year in federal and state student financial aid including Office of Education programs, Social Security benefits, VA benefits, and state scholarship programs.
- 8. Students have advocated consumer protection before Congress. In 1974 the National Student Association spent considerable time to insure that students' rights to their education records and subjects of research established under the Family Educational Rights and Privacy Act of 1974 (Buckley Amendment) were not eliminated as institutions sought exceptions to student access to records. In 1975 the National Student Lobby testified in House and Senate student financial aid hearings, urging that institutional refund and disclosure requirements similar to those of GSLP regulations be enacted into law, and the U.S. Commissioner of Education be given responsibility to require disclosure by institutions in standard forms which would allow comparison's between institution's and programs-rather than having current college catalogs qualify as disclosure documents.
- 9. Student representatives have reviewed federal information and disclosure programs. During the year 1975-76 students will participate in the Fund for the Improvement of Postsecondary Education's Better Information for Student Choice project to determine if information standards being developed by institutions meet students' information need. Students will also review the activities of the Office of Education contractor which is designing an institutional disclosure form, questionnaires for enrolled students and alumni, explanatory pamphlets for students, institutions and state agencies, and an institutional monitoring system by the Office of Education's Accreditation and Institutional Eligibility staff.

A Role for Students

There are important roles for students, student services organizations and students' attorneys in both defining consumer protection and in providing consumer protection services. Students can:

- 1. Establish specific student legal rights to configurer protection, particularly rights to refunds and trainformation;
- 2. Assist in translating legal rights into information and redress procedures for individual students, prospective students and their families;
- 3. Monitor and critique the consumer protection models designed by others, particularly to insure that they provide practical redress for consumers; not simply rhetorical redress to satisfy the purposes of regulators and others;



4. Design new information collection and dissemination services and agencies which are student-constrolled and student-run.

TOWARDS A COMSUMER PROTECTION SYSTEM FOR POSTSECONDARY EDUCATION

Regulatory responses to consumer protection in postsecondary education have been diverse; ranging from the traditional licensing and accrediting activities of educational institutions by state governments and by private peer review groups, to the new direct intervention activities in regard to advertising, enrollment contracts, refunds and student loans by the U.S. Office of Education and Federal Trade Commission.

The responses. however, have been uncoordinated, with one agency or private group often not knowing what the other was doing—or. disagreeing on who has jurisdiction over a problem, over who has the resources to solve the problem, or even over definitions of what the problem is.

The blanket phrase consumer protection has been thrown over many activities leading some persons to believe there is a conprehensive consumer protection system.

There is no comprehensive consumer protection system. There has been, in the past two years, however, a great increase in the discussion of consumer protection among diverse parties and interest groups involved in the debate.

Students. as an interest group, have engaged in these discussions asking: "What is the definition of consumer protection both as a whole, and in response to specific problems? What is the cost of consumer protection? Which agency should be coordinating protection or regulation? What will the regulation cost individuals, groups, agencies, and society? Exactly whose purposes are being furthered by each consumer protection activity?"

As more people discuss these questions the definitions will become more commonly accepted and there will be increased coordination. Consumer protection will begin to be a real system, with definitions, purposes, principles, limitations and expectations of its own, rather than being a description of the unconnected parts of a developing system.

In defining the consumer protection system, students need to set forth their purposes, definitions, principles. and expectations. Students need to establish their role in the system. The role of prospective students, students. and their families, can be based on the analogy of the motorcyclist in the book Zen and the Art of Motorcycle Maintenance. The gist of the book is that persons must inferact in specific ways with systems designed to serve them (either motorcycle systems or educational systems). In discussing consumer protection, we have been proceeding without recognizing that care and maintenance by students, as well as by the institutions, is necessary to give the system much of its purpose and direction. Students, as participants in education, should pay part of the costs, monitor the machine, determine when it is getting into trouble, and take responsibility to fix the machine, or trade it in when trouble does occur.

A comprehensive consumer protection system does not mean much to prospective students unless it establishes

rights to information, financial resources, and resolutions of conflicts. A prospective student and his or her family should be able to receive information, resources and educational services of a known quantity and quality. Without the right to these planning constants, persons cannot make personal decisions in a rational manner. They cannot gain control over important and complex decisions.

• Federal Role is Emphasized

The federal government will play a crucial role in establishing a student's, prospective student's and his or her family's right to information and personal counseling services. Without the establishment of these rights in federal and Constitutional law, and the designation of responsibily ities in federal, state and local governmental agencies, postsecondary institutions, and information services, there is no hope that the information or services will be client-centered, any more than elementary and secondary educational services are structured to be client-centered today.

Competing Information Sources

A prospective student should have the right to competitive sources of information. This need arises from a basic principle of accountability to individuals. That is, no person should be subject to information from a monopoly information source because the information will necessarily reflect the purposes of the information source. This principle is particularly important in education because the widely diverse kinds of students in diverse communities with diverse postsecondary educational purposes can never be served by limited information sources.

The state and local government's role in providing information should be complementary to, and in partial competition with, the federal role. Government information services should also complement and compete with institutional and educational information services, and information from business and labor, and student organizations.

A STUDENT INFORMATION BILL OF RIGHTS

The following are key elements in a complete Postsecondary Educational Maintenance System, gleaned
from the experience of this writer and other student representatives over the past four years of tinkering with the
student financial aid and student information system.

1. The Right to Complete and Accurate Information About All Postsecondary Educational Opportunities and Resources.

Students, prospective students and their families should have the right to complete and accurate information about their postsecondary educational rights, opportunities and resources from governmental and institution-



al sources. This information should be validated by student testing through consumer-based organizations; and be in easily understood formats and be readily accessible to students. This should also include the right to information collected directly from students and former students by agencies outside the institution.

2. Statutory Guarantée of The Right to Information.

The basic full disclosure provisions should be enacted into statute as a requirement of eligibility of each institution which enrolls students receiving federal assistance. Such a provision should be self-executing (not requiring regulations before going into effect) and should be the basis for individual student's rights to sue for damages for misrepresentation. Exact definitions of what is complete and accurate information and what should be disclosed will evolve over a period of years. We feel that this principle of jurisdiction over postsecondary educational institutions is important to protect students who need information, and to ensure the purposes and fulfillment of all federal student aid programs.

This statutory guarentee should also charge the U.S. Office of Education with the responsibility to issue regulations to ensure that disclosures are made in standard formats which are understandable to prospective students, and which promote comparisons between programs and institutions.

3. Regulation Must Be Under the Control of Consumers and the Public to Ensure Credibility.

For the purposes of public credibility, students, potential students and members of the public should be placed in positions of responsibility on federal regulatory bodies, state licensing and approval bodies, private accrediting bodies, and other bodies which collect and disseminate information about education, handle educational complaints and regulate postsecondary education.

4. Self-Help Remedies Are Best For Students and Society.

Students, prospective students and their families should have the right to local information, local advice and local resolution of problems, so they can pursue individual self-help remedies, without making long distance-phone calls, "without making a federal case out of it," and without needing extensive counseling or legal assistance. This means that remedies should be designed to allow the resolution of competing claims with the least amount of consumer time, expense, red tape, or expertise. When similar problems arise for large numbers of persons (such as the refund due when a person withdraws from school), it is important that the rights of the student and the school are clearly defined so that the resolution is made without the necessity of extensive negotiation or litigation.

· 5. Right to a Local State and National Complaint System.

Students, prospective students and their families should have the right to locally file complaints about

financial transactions, program abuses, misinformation, or misrepresentation, or discrimination, and to have such complaints processed locally. Complaints should also be analyzed at statewide and national levels so that patterns of abuse (such as in the Guaranteed Student Loans) can be identified quickly through an early warning system.

6. Institutions Should Have a Stake in the Success of Students: Private Enforcement in Regulating the Advertising and Admissions Process.

The best regulatory principle for the admissions process is to give institutions and agencies which enroll, or assist in enrolling, students a stake in the success of the student. With such a stake, institutions and agencies will expand information and counseling services to assist students in making wise decisions about choosing a school and in remaining in school after admission.

At schools where salespersons and admissions officers are on commission or similar reward systems in which their motives are potentially in conflict with those of students, such persons should receive salary commissions based not simply on enrollment, but upon (1) enrollment and completion of one or two weeks, (2) persistence for an additional period of one or two months, and (3) completion. This principle involves the reverse side of the fair and equitable refund policy. Since tuition and fees refunds are based on completed time, so should commissions paid to salespersons.

7. A Local Advocacy Structure Outside of Educational Institutions Is Needed for Prospective Students.

A student, prospective student and his or her family should have access to information, advice help, and advocacy in educational planning from a local organization which has as its primary purpose the advocacy of the student's interest in the transition from school to work, or from school or work to postsecondary educational opportunities. Its core program should be built around an information system, not simply a counseling system. It should play a central role in local and statewide planning. It should bridge the gap between manpower training programs and educational programs, both for students, and for persons responsible for planning and administering those programs.

8. A Massive Increase in Consumer Reports and Student Services To Meet Student Needs.

Services for students, delivered both by non-profit and for-profit agencies, should be expanded greatly, particularly student consumer reports, including data collected, analyzed and issued by consumer controlled agencies.

9. Legal Services for Students and Potential Students.

Legal services are needed to advise and assist individuals in understanding their legal rights and obligations in postsecondary education. Questions concerning access to information, admission, financial assistance, pro-



gram evaluation, individual expression, and occupational requirements are examples of areas where such aid is needed. Students and prospective students should have access to legal services in a professional relationship in which attorneys and other legal resource persons are responsible primarily to their clients and not to institutional or governmental third parties.

10. Right to Control Educational Records.

Each prospective student, student and non-independent student's family has a legal interest in educational information collected about him or her by elementary, secondary and postsecondary educational institutions; by local, state and federal governmental agencies; and by private educational testing or information services. Each person with such an interest should have the right to prevent release for unrecorded purposes or for purposes unrelated to the need for its collection, to examine and correct such records, to have such records transferred under certified conditions to other personal record keeping centers, such as educational credit banks, and to otherwise control such records.

11. Right Not to Participate in Information Collection Activities.

Each student, prospective student and their family has the right to privacy in not participating in educa-

tional or other research information collection activities and in planing restrictions on how the information is collected and used.

12. Independent tudent Organizations are Needed to Collect, Validate and Disseminate Information to Student Consumers of Education.

Because most information about postsecondary edual cational opportunities is collected, organized, and disseminated to meet the needs of educational institutions seeking specific student clienteles, this information, even when adequately distributed, serves institutional needs more than student needs. If better information is to be made available to aid in student decision-making, it is crucial that research organizations controlled by student consumers be developed to collect, organize, and disseminate information that meets the needs of students, prospective students, and their families.

In addition, consumer research organizations are needed to validate the collection, organization, and dissemination methods of other sources of information. It is particularly important to have an organization independent from institutional or governmental information collection agencies that would monitor information collection practices and protect the rights and interests of the students who are the subjects of the research. Students also need to be assured that the results of the research will be made available to the students involved.

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WHAT STUDENTS NEED TO KNOW About Colleges

This chapter examines, from a student perspective, what students need to know about postsecondary educational options. This chapter focuses on higher education and only by inference includes technical vocational, and proprietary schools. Any complete information system must also include information on these areas, as well as on job and career options. This paper discusses the increasing pressure for better information, and the potential benefits resulting from providing better information to students. It examines the available research on: what students need to know about colleges; the reasons students give for obtaining a postsecondary educational degree; and implications for college information dissemination. Finally, the chapter discusses potential information sources.

PRESSURES FOR BETTER INFORMATION

There is a need to maximize the available national educational resources at a time when those resources are shrinking. Presumably, better information would facilitate a botter "match" between students and institutions thereby increasing the efficiency of the institution and minimizing student attrition.

Proprietary and technical schools have been included under federal programs previously reserved exclusively for higher education. The profit-making nature of many of these schools has raised the issue of consumer protection in postsecondary education. Declining enrollments have intensified the competition for students, thereby sensitizing policymakers to the possibilities of consumer fraud by colleges. These forces have have combined to raise the issue of consumer protection for all postsecondary educational institutions.

Both federal and state governments are moving in the direction of a "marketplace" strategy for funding postsecondary education. This strategy assumes that financial aid will be "carried" by the student to the institution. The success of this strategy depends, in part, upon students being able to discern which institutions best meet their needs.

From a student perspective the most immediate need for more complete information about collegiate institutions is the need to maximize their educational spending through a better knowledge of how programs facilitate obtainment of student goals. To a lesser extent, there is a need for consumer, protection from misleading college recruitment practices. A third student concern, rarely articulated, lies in clarifying the purposes of a college education. The development of better information should include a debate over what students can expect from educational institutions. This information should modify student behavior by allowing students to "vote with their feet." Information should modify institutional behavior by clarifying their purposes and forcing them to more closely parallel student needs and goals.

There is a limit to the benefits of better information. The importance of information as the basis for postsecondary educational choice presupposes a rational marketplace. This is clearly not the case. For most students the decision to attend college continues to be motivated by socio-economic status and standard measures of academic ability - two factors which are correlated. Indeed, what appear to be the most effective programs at enabling minority students to attend college - TRIO programs, Educational Opportunity Centers, Educational Opportunity Programs - are geared less towards information and more towards recruitment. Many students of higher socio-economic statús and measured academic ability choose institutions on the basis of status and prestige. While it may be argued that institutional status is a form of information, such status depends not on the distinctive characteristics of the college but on the degree to which it compares to the most elite academic institutions such as Harvard, or Berkeley. As such it is extremely one-dimensional and limited information.





Many other situational factors may make college choice Inot necessarily a "free" choice. Students may make choices. based upon: their desire to remain in a geographical areas. their ability to attend full or part-time, influence from parents and others, religious affiliation, the degree to which their friends attend the same institution, or the view of college wany college - as the place to be during the draft or a recession. The degree to which colleges are selective further limits student choice. All students face financial constraints limiting their choices among public and private institutions, state universities, state colleges, community colleges, in-state colleges, out-of-state colleges, and so on. The most important choices may be in choosing whether or not to go to college. among programs at specific institutions, and how these programs relate to jobs and careers. It is in these areas of choice that the most complete and accurate information is needed.

The concern of policymakers for maximizing resources, consumer protection, and a marketplace strategy for funding, and student concern for a better choice of institutions, consumer protection, and institutional change, obscures the central question of precisely what information students need to know to make those choices. This question must be addressed in order to formulate a useful information system. Hypotheses on what types of information are useful and needed should be established on the basis of interviews with prospective students and subsequent field testing.

 RESEARCH ON THE INFORMATION NEEDS OF STUDENTS

Several observers have noted the lack of thoughtful analysis of what students need to know about college opportunities (Kinnick, 1975, "Better Information for Student Choice...," 1975, Shapiro, 1974). Most exceptional is a 1975 study by Kinnick surveying a cross section of Oregon's prospective students, current students, and admissions officers. Kinnick's study is particularly important in that it is the only survey directly asking high school students what they feel prospective students need to know. Kinnick was able to develop a hierarchy of information areas and the respondents' perceptions of information availability in those areas. Several other findings of the survey should be noted:

Kinnick emphasizes that "it seems clear that when asked, students can clearly and comprehensively identify what they feel they need to know about postsecondary education. Because the perceptions of prospective students differ significantly from current students and admissions officers, it would seem wholly inappropriate and misleading to estimate prospective student information needs only from soliciting the responses of current students or admissions officers" (Kinnick, p. 112).

The information needs of students confronted with different kinds of choices (should I enroll in college, which institution should I enroll in, which program should I enroll in) were very similar. This suggests that information development and delivery may concentrate on the same items for students in all three situations.

There was particular interest on the part of prospective students in gaining information about course requirements

for a major and graduation, length of time to complete the program and program completion costs; future job and skill demand, job and career entry qualifications, the need for more education to succeed in particular areas and the number of graduates who get the jobs they apply for; the transferability of credit; and the degree of difficulty in entering and specific program of interest. Kinnick also found that while "the students had been asked to list only the information needed about postsecondary education [they] time and again submitted items calling for more information about the job market, career opportunities and a self-review of their own capabilities, motive and interests" (Kinnick, p. 87).

Current students, while in agreement with the major information priority areas of high school students added the areas of the availability of help from an instructor or tutor if there are difficulties with the course; the availability of job placement assistance while in attendance and upon graduation; and information about what the programs prepare students for and enable them to do. Kinnick suggests that "perhaps the direct experience they have had with postsecondary education account for the high ratings given to these particular areas" (Kinnick, p. 113).

Substantial differences were found between the items rated important by students and those rated of importance to prospective students by admissions officers. The admissions officers underestimated the importance of information about teachers and instruction, results of attendance and jobs.

Kinnick's findings reveal the importance of involving students directly in developing information about institutions. The greatest information needs seem related to the specific programs rather than institutions. This is true regardless of the choice situation — enrolling in college, institution, or program — faced by the student.

There is also a body of research which, while not directly related to what information students need to know, seeks to learn more about how students change in different college environments. This research is important because it establishes that institutions do have different effects on students, and it seeks to isolate those factors which cause the different effects. Ultimately, this type of information may be the most useful to students.

Astin (1968) attempted to isolate factors in the peer groups, classroom, administrative and physical environments of colleges that had impact on students' development. This research is particularly interesting in that Astin was able to break down his findings according to types of institutions. For example, he found university environments to be highly competitive, with a high frequency of organized dating, and relatively little participation in musical or artistic activities; instructors and students were not personally involved in the class, students were unfamiliar with their instructors, grading practices were severe, and there was little concern with the individual student.

Astin and Panos (1969) attempted to assess the significance of institutional diversity in the production of skilled manpower by comparing the effects of different college environments on undergraduates' educational aspirations and career plans. The authors found that the large observed differences among institutions in their students' educational outcomes was mostly



INFORMATION
IMPORTANCE
BY ITEM
CATEGORY
AND GROUP
MEMBERSHIP:
MEANS AND
RANKS

1 = low 5 = high

(Kinnick, 1975)

	MEMBERSHIP GROUP									
		_High Sch		College		Admissio	ns			
QUESTIONNAIRE ITEM	No. of Item	Item Group Mean	Rank	Item Group Mean	Rank	Item Group Mean	Rank			
Admission -	6	4.01	7	3,87	9	3.68	. 7			
Costs	5	4.12	3	4.19	2.5	4.18	2			
Financial Support	8	3.88	9.5	4.12	5	4.26	1			
Physical Surroundings	3	4.00	8	3.70	11	3.75 ⁻	4			
Social Life and Activities	.: ** 5	3.56	12	3.26	12	3.45 🔧	11			
Teachers and Instruction	6	4.05 ·	5	4.14	. 4	3.67	8			
Support Services	7	4.07	4	4.00	4	3.70	5.5			
School Reputation	4	3.82	11	3,92	. 7	3.18	12			
Other Characteristics	9.	3.88	9.5	3.80	8	3.60°	. 9			
School Program	12	4.14	2	4.19	2.5	3.82	3			
Results of Attending	12	4.04	6	4.05	6	3.51	10			
Other (Jobs, Careers	6	4.30	1	4.28	1	3.70	5.5			
TOTAL	83	4.00		4.00	,	3.72				

a function of the differences in the entering student bodies. However, environments did seem to explain some of the differences in outcome.

Chickering (1969), in a five year longitudinal study, identified six institutional conditions of small colleges which seemed to enhance the students' personal development. Seven major "vectors of development" were achieving competence, managing emotions, becoming autonomous, establishing identity, freeing interpersonal relationships, clarifying purpose, and developing integrity. The six conditions were: clarity and consistency of institutional objectives, institutional size, particular characteristics of the curriculum and the teaching and evaluation processes, residence hall arrangements, faculty and administration interaction with students, and the student culture.

Clark et al (1972) attempted to account for differential changes in student characteristics caused by the influence of colleges. They found that while differences in the student body accounted for a great deal of the student change, the kind and degree of change also depended upon student-institutional match.

STUDENT PURPOSES

Three national studies have been undertaken which examine student purposes in obtaining a postsecondary education. These purposes are significant in that, presumably, students choose options in programs that would maximize the likelihood of achieving these ends. Information, in part,

should facilitate a student's understanding of how an institution would help them obtain their goals.

Engen and Crippen (1973) conducted a survey of approximately 11,000 students at 188 diverse institutions for the National Commission on the Financing of Postsecondary Education. This survey was supplemented by regional review sessions with another 300 students. They identified the single most important student objective in obtaining a postsecondary education as self-development (34%). Other objectives in order of their importance were "employability" (25%), "income" (16%), and "sociability" (14%).

A second major study undertaken by the Commission on Non-Traditional Study (1973) attempted to gauge the demand for learning opportunities among older individuals. It reported that 70% of "would-be learners" and 69% of "current learners" wanted to learn for "informational and intellectual development. The study listed 52.3% of would-be learners, and 47% of learners wanting to learn for reasons of job and educational development.

Finally, Yankelovich (1974) in an interview of 1006 college students found that the two major purposes in obtaining a degree were self-development (34%) and later economic rewards (35%). Yankelovich concluded:

The remaining 32% are, in a sense, the most interesting. They are the young people who put a strong emphasis on the intagibles of self-fulfillment and self-actualization and yet, at the same time, their major purpose in going to college is for the practical career training. They strike what is perhaps the dominant theme of today's college climate: they are trying to achieve a synthesis between the old and the new val-



ues by assuming that it is possible to seek and find self-fulfillment and personal satisfaction iff a conventional career, while simultaneously enjoying the kind of financial rewards that will enable them to live full, rich lives outside of their work (p. 20).

The findings of these studies indicate that there are currently two main student purposes in obtaining a college education: self-development and economic rewards. At a broad level, information about colleges should be organized in a manner that facilitates student understanding of how a college degree and particular institutions can contribute to the realization of these purposes. Currently, even a cursory review of college catalogues reveals that while colleges may imply that they contribute to a student's self-development this claim is characterized more by rhetoric than by substance. Many colleges have consciously down-played their relationship to the career development of their students. This ignorance of their career role creates a serious impediment to the students' ability to select colleges and to plan for a career. Yet, colleges have benefited from the widely held belief that a college degree is the key to middle class status,

INFORMATION NÉEDS OF DIFFERENT TYPES OF STUDENTS

While little research exists on the information needs of students, still less exists on how different types of students (older, women, minorities, part-time) may need different kinds of information. Indeed, with the exception of Engen and Crippen, the research cited in this essay focuses on the traditional, full-time collegiate student of disproportionately White, male, and in the 18-22 year old age group.

Cross (1972) gives some indication of the possibilities of different information needs in arguing that "New Students," whom she defines as those scoring in the lowest third on achievement test scores, have a negative view of learning opportunities. Cross argues that new programs which go beyond simply an academic model of learning are required for these students. But she notes that "For New Students, the school situation has been a fearful experience, and the lessons they have learned are handicaps to future learning. In developing new educational programs for New Students, one of the first tasks will be to provide a new perception of the learning process" (P. 46). Information for such students should be based on this perception.

It would appear that older students have differing informational needs than traditional students. Older students, rather than beginning a career at 18 and requiring information on overall career patterns and educational programs may require a more job-specific set of information. That is, they enter the educational system from the point of a career of mid-life and may need to know how education can advance them in their career, facilitate a change of careers, or prepare them for entry into a career at age 40. Such students also require information on programs in their geographic vicinity and at hours of the day that they can attend, as well as information on different types of services such as child care.

These two examples are obviously not exhaustive but suggest that the development of information should take into account the needs of differing types of students.

ADDED ASPECTS OF THE DEBATE ON WHAT STUDENTS NEED TO KNOW

The lack of concrete data on what students need to know has led policy-makers to debate the issue according to what information systems exist that may be made available to students, such as management data from the HEGIS (Higher Education General Information Survey) system. From a student perspective two additional sources of information should be included: (1) clarification of missions by institutions, and (2) student course and professor evaluations.

The Newman Report (1971) has noted the vagueness of purpose and institutional mission which characterizes most colleges. Newman notes that some differentiation existed among different types of colleges prior to 1950;

But these differences also have all but disappeared. Steadily liberal arts curriculum have become the standard of both public and private colleges. The agricultural college, the teachers college, and the mining school have tended to transform into the State College or further into the State University. The growth of Federal support enabled many institutions, both public and private, to expand into graduate education and to hire faculties oriented to academic disciplines rather than career-related programs. Even in the new and rapidly growing community-junior colleges, two out of every three students are enrolled in a transfer program designed to prepare them for academic degrees at a four-year institution....

At the same time diversity among institutions has declined, diversity of course offerings within each in stitution has been increasing. Technical colleges have added the humanities; social sciences departments have been established; traditional disciplines have subdivided. The uniform acceptance of a diverse curriculum is an indicator of a growing similarity of mission: that of providing general academic education. The system of higher education as a whole is now strikingly uniform: almost all the institutions have the same general image of what they want themselves—and their students—to be (p. 13).

This factor contributes to student confusion over differences among institutions. In the past two decades students have been forced to differentiate among institutions primarily on the basis of status and selectivity. The Newman Report notes:

Individuals today have a choice among colleges which are 'easy' or 'tough,' 'first rate' or 'third rate.' This is essentially a choice derived from the differences in the prestige and orientation of faculties, and the consequent tigor of admissions policies and academic offerings, It is not a choice between institutions which offer different modes of learning, but between institutions which differ in the extent to which they conform to the model of the prestige university. For every school with the distinctive character of Berkeley, Antioch, Northeastern, or Harvard, there are fifty or a hundred institutions with little to distinguish them,



one from the other. Some students we have interviewed see themselves as 'State college students' rather than as students with an identity derived from a particular campus (p. 15).

The foremost example of an institution defining its mission to facilitate student understanding appears to be in the case of institutions adopting competence-based learning. Under this system the college must more clearly delineate what it expects the student to achieve, how the college will contribute to that achievement and how the student will be evaluated. The students know in advance what they are expected to learn and what they can expect of the institution. Alverno College describes its own such program,

In order to integrate into a developmental educational experience these three strategic components - manage ment of change (process), academic experience (content), and professional direction (motivation), we identify as our core learning strategy - Competence Based Learning. In effect, the student goals, then, become those competences which students must achieve in order to graduate. What that process of achievement involves' is careful direction for the students in relating goals to values and career aspirations, in making maximum use of learning resources, in assessing stages of development, and ultimately in earning a degree. For Competence Based Learning, as we see it at Alverno, is a process where by certain abilities fequired of a student and the criteria used in assessing squisfactory demonstration of those abilities are made explicit, and the student is held accounting for meeting those criteria. (Alverno College Calilog, 1974-75, p. 14)

Student course and professor evaluations have been increasing over the past several years. They are of varying quality and methodologies. The principle in all of them, however, is that students undertake to evaluate their courses and teachers. This development is important beyond its immediate application of enabling students to make informed choices on enrolling in certain courses. These studies could be expanded to include general satisfaction surveys by field and institution. If developed in such a fashion they would present useful documents for institutional disclosure.

In general, these efforts should be supported and encouraged to develop. Where broad evaluations are available they should be used by institutions as part of the information made available to prospective students.

Conclusions

l. From a student perspective better information is needed in order to maximize the investment of time and money. Better information would facilitate an improved match between students and institutions by giving students a better understanding of how a college education, an individual campus, and a given program can contribute to attainment of student goals. Better information should also contribute to protection against misleading recruitment practices, and in changes in institutional practices as well as student choices.

2. Although information is important its value is limited. The importance of better information presupposes a perfect "market system," which is not the case. Access to higher education, and choices among institutions, is still largely dependent upon socio-economic status, traditional measures of academic ability, and financial resources. Choices among institutions may be based on a host of situational factors that further limits the relevance of better information.

3. The biggest information needs may be in the areas of choosing whether or not to go to college, which program in a particular institution to take, and how attendance in the program relates to jobs and careers.

4. The effort to generate better information should be accompanied by an effort to clarify student objectives in obtaining a college education and in clarifying the missions of institutions. A significant step towards better information will be made if institutions recognize the duality of student, purposes, economic rewards and self-development, and can clarify their missions, and how those missions can facilitate the realization of student purposes. In a system of institutional similarity where students must choose on the basis of status and prestige, information has limited value.

5. The only way to effectively answer the question "what do students need to know about colleges," is to survey prospective students directly and to subsequently field test the results. Further research such as Kinnick's should be undertakeri.

6. Future research should attempt to discern what, if any, differences exist in the information needs of different types of students. Research on what kinds of institutional conditions cause differential change in students should also be supported. Although this research is not immediately useful, it promises to yield important information with which to differentiate among institutions.

7. Students should be involved in developing information systems. This is necessary because their perceptions differ from those of administrators. One means currently available is through student course and professor evaluations.

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Information as A FACTOR IN DECISION-MAKING By Prospective Students

Many aspects of educational consumerism have been examined. Most studies, however, fail to analyze the color of information and of information dissemination, in the decision making process of prospective students investigating their postsecondary educational options. This paper will fectis on the elements of educational decision-making by prospective students.

Information Dissemination

The dissemination of information is an important factor in the decision-making process of prospective students. When the information provided on various postsecondary eduçational options is inadequate, the ability of an individual to make reasoned decisions about his or her future is impaired. To understand this problem it is necessary to create a model of the decision-making process and then examine the model to determine where deficiencies occur.

(see model on next page)

In this model, dissemination functions as a control mechanism. That is, the act of dissemination constrains the information flow in some way. Educational institutions constrain the flow of information to prospective students in three ways. In the direction (or misdirection) of information to specific types of individuals or groups. In the quantity of information an institution provides to an individual. In the type of information an institution chooses to disseminate about itself.

The phrase 'information dissemination' is used here to describe those efforts undertaken by an educational institution to attract potential students. This can include the preparation of catalogs: brochures, radio; television and newspaper advertisements; and other printed materials as well as

the utilization of personnel in recruitment, admissions and counseling. This information can be directed at prospective students, their families, their peers, and other persons who can influence decisions to enroll in educational programs, including teachers, counselors, ministers, and social group leaders.

The type of information provided can be viewed in three ways:

(a) by the informant, (b) by the recipient for the informant, or (c) by the recipient for the recipient. This means that the information is distributed, selected, and understood according to the perceptions of the institution and of the individual.

For instance, in the university-prepared pamphlet, "Why You Should Attend Calvin Coolidge University," the information included is selected by the university to attract potential students. The understanding of that information by the recipient is in the context of deciding whether he or she should be a student at that university.

The dissemination of information by an educational institution also contributes to the operation of the processing mechanism in the decision-making model. Processing comhines the fittered information from the control phase (sup--plied by the institution through information dissemination), with the concrete and fluid characteristics (needs and goals) of the individual, to form a set of criteria used in determining the usefulness and relevance of the information received. A decision will be made regarding the usefulness and meaningfulness of the information on educational options in light of the individual's desired objectives as a prospective student. The recipient will district the useless information in the process stage, and bristanto the decision stage that information she or he has perceived to be meaningful. It should be noted, however, that one can only discard and use information which is received.

Finally, in the decision stage, the recipient chooses among the most plausible alternatives. The information that was meaningful, although perhaps not directly utilized, is stored



in the recipient's mind for input into the process of later decisions.

Problem Areas

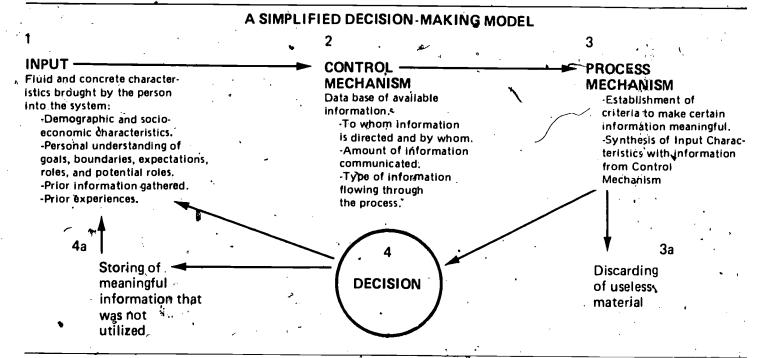
STUDENT NEEDS

A basic premise that is usually ignored in postsecondary educational research is that individuals need certain kinds of information in order to make decisions that satisfy their personal goals. Fundamental questions long overlooked by researchers include: "What kinds of information can best benefit the many kinds of individuals considering post-secondary educational options in assessing and achieving their personal goals?" "What kind of information is most likely to reach a prospective student?" "In what form do individuals find information to be most helpful, i.e., workbooks, pamphlets, advertisements, talks by recruiters or by outside parties?" "What kind and form of information allows potential students to develop an awareness of their own decision-making strategies and how to use them?"

Research is lacking in this area for a variety of reasons.
(1) Identifying and classifying individual information needs is difficult on a large scale basis. (2) Samples are difficult to use because of the changing nature of the potential student constituency. (3) Aggregate common informational needs

are difficult to quantify due to the multiplicity of psychological and social factors. (4) The individual's determination of criteria in rating information useful or useless is difficult to quantify because of the highly personal nature of both an individual's use of such information in a decision-making strategy, and an individual's perception of information need. (5) In addition the significance of an institution's filtering. process in the control phase (information dissemination) has been overlooked. (6) Finally, the major impediment to research on student purposes and needs is the fact that the data that researchers have to work with has not been collected or evaluated based on its usefulness in clarifying student or prospective student needs, goals, or decision-making processes. Students' goals in assessing their postsecondary educational options have been described in the categories of selfdevelopment, and development of occupational or other skills which will enhance employability for economic security. Data available for researchers has been collected-and without major changes will continue to be based-on the goals of institutions and governmental agencies concerned about enrollment and cost figures, and manpower, research, public service and socialization outcomes.

The task of studying information presently being disseminated is an enormous and time-consuming job; a study of that information which institutions choose not to disseminate has not been undertaken. In order to study student needs, information sources and information recipients must be identified, the amount of information disseminated must be examined, the type of information flowing through the process must be identified and sorted, and the "impacts" of information must be conceptualized and measured. The continuing fail-



This is a simplified decision-making model comprised of basically four elements: the input, control mechanism, process mechanism, and the decision. The boundaries of the model are determined by the very lowest level of alternatives — the decision to attend postsecondary education or not.

This model suggests that decision-making will only be as effective as is the adequacy of the communication; especially the dissemination of the information, and the understanding of that information. Understanding of the information is necessary so that the impact can be meaningfully translated into alternatives for rational consideration, or properly discarded. Adequate communication, therefore, is necessary so that all individuals have enough information for a common base for decision-making.

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ure to do this contributes largely to the seeming contradiction that information providers are distributing a wealth of information, while information recipients are receiving little meaningful or useful information. Thus, increases in the information flow should not take place until the types of information, the amount of information, and the dissemination process are identified in relation to the needs of potential students.

Clearer Definitions of Student Needs

Student needs in decision-making must be more clearly defined in terms of what information is useful to the decision-making process. One cannot adhere to the notion that students should base decisions on currently available information. In fact, students may become aware of additional information needs when they are exposed to misdirected and useless information currently available. Therefore, in studying student needs, it is important to realize that availability of, and the reception of information must be considered as separate and distinct major influences on the realization of information needs.

Another problem that necessitates further research involves the relationship between student needs and crisis situations in the decision-making process. Within the framework of the model, the student's expectations force the input into the decision-making system. These expectations are built upon past interaction with the environment and combine with life experiences and personal changes to create new expectations. The decision-making process model does not adequately deal, however, with crisis situations in which expectations are suddenly jolfed. For instance, if one decides not to attend a postsecondary educational institution based on an expected job offer, a crisis occurs when the job plan fails to materialize. What happens to the previously meaningful input? What kind of, and how much information will the individual need to quickly and reasonably deal with the unexamined and unexpected alternatives?

ADEQUAÇY OF INFORMATION

Postsecondary educational researchers and policy-makers are currently discussing the importance of "adequate" information. "Adequate" information cannot be defined by examining just one component of the decision-making system; the results of the entire process determine the adequacy of the information. That is, if the individual utilizes what she or he feels to be "quality" information to her or his best advantage, and the decision is successful in enhanting desired objectives, then she or he may feel the information was adequate. But problems exist in identifying and classifying student needs. Obviously, information that is "adequate" for one person is not necessarily "adequate" for another; this implies a time-consuming task of surveying sample populations to determine common perceptions that may or may not be standardized.

Also, adequate information can only be defined in terms

of what information is available and what information is received. 'Although the two concepts of availability and reception are often equated, they are sometimes radically different.

The two concepts of availability and reception contribute to the limitation or distortion of the information flow through the decision-making system. Many institutions claim to provide a wealth of information, while interested individuals fail to receive all of the information offered, and thus, base decisions on incomplete information. The fact that an institution makes a bulk of material available does not necessarily meanthe information was received by anyone.

IMPROVING DECISION-MAKING

There are two major problem areas that deserve further attention. The first problem is the lack of emphasis given to the process of decision-making by information providers, especially institutions and counselors: The second problem lies in teaching prospective students how to obtain the necessary information to make informed decisions.

Most institutions, in typical public relations white-wash style, provide information appealing to the eye, to the emotion and to the expectation. The information provided tends to ignore available alternatives, risks involved, actual institutional practices (as opposed to institutional philosophies) and other facts an individual should be cognizant of in order to make reasoned decisions.

High school and other counselors should also view the decision-making process in its entirety. Counselors should provide a more balanced picture of institutions and alternatives in order to aid the high school student, and should be especially aware of their own roles as information disseminators.

Several programs currently on the market are designed to help the counselor and the student with educational decisionmaking. Some are career-oriented and involve testing and career option information. Others are general programs designed to assist both the information provider and the student in understanding the decision-making process. One such program is "Deciding" prepared by the College Entrance Examination Board (Gelatt, Varenhorst, and Carey, 1972). This program teaches students in junior and senior high school how to make responsible decisions, using counselors and teachers in the process. In this way information providers review the intricacies of the decision-making process while sharpening their own skills as information disseminators. Students, on the other hand, learn about their own personal values, about available educational alternatives, about how to obtain necessary information, and about how to develop a personal decision-making style.

Teaching students to locate necessary information for their decision-making is the second major problem area. The individual who wishes to receive information often does not know what information they need or where to find it. The "Declding" program offers a plan of action in locating, selecting and evaluating information, but it is one of the few programs offering this training. The practice of seeking out information helps an individual understand the decision-making process and gain more control over her or his own life.



Conclusions

The following recommendations suggest actions to be taken to improve the information dissemination system in postsecondary education and the decision-making process of prospective students.

STUDENT NEEDS

- 1. More research must center on those individuals deciding not to attend postsecondary educational institutions immediately after high school. More of an effort should be made to understand this increasingly common decision; and to meet these individuals possible later educational needs. Many factors influence such a decision and most tests and surveys either do not ask the questions or ask it in an improper or biased manner.
- 2. Profiles should be developed on students and potential students in an effort to discover what kind of information is useful to them. Individuals and institutions can be classified by specific categories such as those used by the Carnegie Foundation in their report More Than Surviyal (Carnegie Foundation for the Advancement of Teaching, 1975. Examples of Carnegie Foundation student "types" include "ethnic minority," "adult over 22," "previous dropout," and "transfer." Other "types" can be designated based on common problems being faced, common decision-making strategies used, or other common problems of behavior. The main purpose is to determine categories which will assist in identifying the particular kinds of information that different target groups need and find useful. Then, appropriate information can be directed towards them, and the bulk of seeless information can be identified and discarded. This provides for a more effective, economical information flow. Furthermore, criteria for definitions of "adequate" information can then be determined.
 - 3. More attention must center on the decision-making pro-

cess as affected by crisis or unexpected situations. Strategies and expectations built on realistic alternatives, both negative and positive, will reinforce the decision-maker in time of crisis, and will help to alleviate the pressures and anxiety caused by unexpected events. Emphasis on assessing realistic alternatives should be made throughout the process, not just during the input or final decision stage.

ADEQUACY OF INFORMATION

4. The increasing flow of information must be better coordinated and targeted to meet individual needs.

5. Methods of distribution, including direct mailings, portable computerized information services, and other innovative techniques should be examined to develop cost-effective and useful information dissemination procedures.

6. Distinctions between available and received information must be determined when examining the information flow through the decision-making process. Incorrect assumptions about student needs and about the results of information dissemination will be made if this distinction is not drawn.

IMPROVING DECISION-MAKING

should be initiated, utilized and evaluated (such as the "Deciding" program). Topics the program should examine include: the separate responsibilities of the decision-maker and of the information provider; decision-making strategy, and how to find and utilize information on educational options.

8. The role of the counselor should be carefully reviewed in terms of the individual's decision-making process. Questions to be examined include: "Is the counselor trained properly to provide information?" "How does the counselor interpret information to match or satisfy student needs?" "How does the counselor aid in establishing criteria for the student's decision?"

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Information Currently Collected And its Potential Use by Students

This paper discusses the kind and extent of information collection and reporting conducted by postsecondary education-related institutions and agencies at the present time. With an understanding of existing information reporting efforts, those interested in the provision of information to students can assess the suitability of required reporting structures for more broadly based education reporting. The potential for coordination and efficiency in information collection and reporting efforts can then be considered.

Information Collection

Numerous educational policy-makers have begun to evaluate the need of prospective students and their families for better information about postsecondary educational options. Several reports have focused on the specific need for consumer oriented information to assist prospective students in making more informed decisions (US Government, Federal Interagency Committee on Education, 1974; Second Newman Report: National Policy and Higher Education, 1974). Others have examined the specific types of information that would be desirable for students to have available in making their education decisions (US Government, Dept. of Health, Education, and Welfare, Fund for the Improvement of Postsecondary Education, 1974; Education Commission of the States, no date).

All of these proposals to provide more information about educational opportunities van imply, among other things, new data collection requirements for education institutions. Since educational institutions presently report information to a host of federal, national, regional, and state agencies

and organizations, new and separate data collection requirements can mean additional staff and other increased costs to the institution. New data collection can require new information component definitions and reporting cycles that differ from existing procedures and reporting format. Preparation of new data elements and reporting procedures can mean a long lead time before institutions can respond with information collection and reporting as requested by students, or by other new users.

The problem can be seen as the equivalent of keeping two sets of books to record information for use in separate but similar reports. Clearly, if needed information could be maintained in one form which could conform to the needs of several different groups requiring information, any one desiring information could obtain it more quickly and at less cost. New interest groups, such as students, seeking to collect information for their constituency are likely to be interested in keeping the cost to their organization low and the responsiveness of institutions to the information requests timely. Educational institutions are more likely to respond accurately and quickly when they are able to report information on a given topic once, rather than differently to each requesting organization. The costs incurred by the reporting institution and the requesting agencies are further reduced when the collection effort is a cooperative one which guards against duplication of effort.

Some of the more common problems encountered when there are multiple collection instruments sponsored by several requesting organizations include incompatible definitions of data elements and incompatible collection procedures. The consequence is an inability to compare data of one kind collected from one instrument with data collected in a second instrument due to differences in definitions and collection procedures. Hence, grouping information requests into as few instruments as possible will yield a greater potential for comparisons among data.

INFORMATION COLLECTION AND REPORTING EFFORTS

Some of the more prominent information collection efforts are currently being conducted by the National Center for Education Statistics (NCES), the U.S. Office of Education, federal agencies involved in graduate education and research including the National Science Foundation, the testing associations — the American College Testing Program and the College Entrance Examination Board — education associations including the American Council on Education, and the American Association of Community and Junior Colleges, among many others. Consortia such as the Education Commission of the States, New England Board of Higher Education, the Southern Regional Education Board, and the Western Interstate Commission on Higher Education are all involved in collection of information on postsecondary education:

The National Center for Higher Education Management Systems (NCHEMS) is a government-sponsored effort to develop information collection and reporting instruments to enhance comparability of information. In each of the states, public institutions report information for budgetary planning and coordination purposes which include the development of statewide management information systems. Associations of independent colleges cooperate in the collection and exchange of information as well.

AGENCIES AND ORGANIZATIONS INVOLVED IN INFORMATION COLLECTION AND REPORTING

A brief summary of some agencies and organizations involved in data collection and reporting is provided. The following information is intended to enable the potential data user to consider the extent of existing information gathering efforts.

The National Center for Education Statistics

The National Center for Education Statistics (NCES) has prepared the Higher Education General Information Survey (HEGIS) instruments to define data elements and to collect institutional data. The scope of HEGIS data collection includes student enrollments, libraries, basic student charges for tuition and room and board, faculty salaries, institutional finances and expenditures, and degrees and awards (U.S. Government, Dept. of Health. Education, and Welfare, Office of Education, Higher Education General Information Survey, various dates).

Concern has been expressed by Congress and HEGIS data users that NCES is sometimes slow in providing reports based upon the data collected from HEGIS. The preparation of a national data base of higher education statistics, however, by the National Commission on the Financing of Postsecondary Education (Carlson, Farmer, and Stanton, 1974) has significantly improved the timeliness and accessibility of data gathered from the survey.

• The Annual Freshmen Survey

An annual survey of freshmen sponsored by the American Council on Education and the University of California, Los Angeles, is conducted by Dr. Alexander Astm. The survey reports attitudes of new postsecondary students toward-many education and social issues (Astin, King, Light, and Richardson, 1974).

Testing Associations

The American College Testing Program (ACT), and the College Entrance Examination Board (CEEB) are associations of colleges interested in collecting information on student achievement, aptitude and need for student financial assistance. Each of the two organizations provides member institutions with summaries of those students who have applied or are enrolled in their respective institutions in addition to reports on individual students.

Federal Government Agencies

Many of the federal government agencies that sponsor research efforts at colleges and universities collect information on the extent of an institution's total research involvement and the support of graduate students. Among the agencies that are involved in sponsoring postsecondary research and graduate students are the National Science Foundation, the National Institutes of Health, and the Council of Graduate Schools.

State Information Collection

Publicly supported institutions typically are requested by state legislative and executive fiscal offices to provide information on finances, expenditures and enrollments as supportive documentation for budget evaluations. In some states, such as Illinois, coordinating boards for higher education have sponsored the development of comprehensive information collection that extends beyond use during the budget process. In Illinois, the Resource Allocation and Management Plan (RAMP) is a systematic data collection effort with common definitions and reporting instruments followed by all publicly supported institutions in the state (Illinois Community College Board, 1975).

Other states, including California, have authorized the preparation of postsecondary data bases by coordinating councils and other similar bodies (California State Legislature, 1974). In Nebraska, management information systems have been mandated for each of the public postsecondary sectors (Nebraska Unicameral, 1974). The state colleges in Nebraska we since prepared detailed information on educational expenditures and projected resource requirements; the community colleges have proposed a statewide reporting structure with common data elements and reporting formats for all of the two year technical community colleges.



The Nebraska Legislature prepares an annual report detailing the probability of a student progressing from one class level to the next for each institution. The report also computes the probability of a student graduating in four years from the same institution as initially enrolled in as a freshman (Ehrlich and Beecher, 1974).

The examples from Illinois and Nebraska illustrate the broad range of information collection interests of the respective states. A greater emphasis upon expenditures and enrollments is revealed in the Illinois Ramp while a relative emphasis upon student follow up and program performance is attempted in the Nebraska community college proposed reporting structure. Many of the states have associations of independent colleges which cooperate in the exchange of information as well.

The National Center for Higher Education Management Systems

To facilitate the exchange of information among postsecondary educational institutions, the National Center for Higher Education Management Systems (NCHEMS) has prepared a data elements dictionary, and has established procedures for collecting and reporting information on expenditures, objectives, and performance of post-high school public, independent and proprietary educational institutions. The NCHEMS Information Exchange Procedures (IEP) are the culmination of four years of effort on the part of cooperating educational institutions to determine what information would be useful to exchange and how to define and collect the information to be reported. Thirty institutions have pilot tested the procedures; an effort is currently underway to extend the use of IEP to several hundred institutions. Again, the purpose of the NCHEMS IEP is not to centrally collect institutional information but to provide a series of instruments and definitions to facilitate a common understanding of reported information that is exchanged among cooperating institutions (for additional information see Myers and Topping, 1974).

Employment Information

Not all information that bears upon the student's decision whether and where to pursue postsecondary education is available directly from educational institutions. Information on current employment opportunities and manpower projects are prepared by state and federal agencies such as the Bureau of Labor Statistics. Still other labor market information is prepared in each state by the equivalent of a research coordinating unit of the state department of vocational education (South Carolina, State Board for Technical and Comprehensive Education, 1974; Illinois, Board of Vocational Education and Rehabilitation, 1974; Nebraska, Department of Education, 1974).

State agencies that administer vocational education funds provided by the federal government are required to conduct surveys of occupational opportunites for the purpose of assessing the present and projected demand and supply for trained manpower in a wide variety of occupational areas. State departments of labor and employment conduct surveys of occupations and regions — frequently in conjunction with the Federal Bureau of Labor Statistics.



The collection of information does not necessarily lead to the provision of data to those interested in the use of the information for research purposes or for making colleges choices as in the case of educational consumers. Published reports based upon data collection efforts do not always provide information in a form desired or usable by researchers and consumers, or for that matter, institutional administrators or state funding agencies. National data may be summarized in a form that does not break down individual states or types of institutions. Information on individual institutions may be lost altogether in summary reports.

One means of making data available in a variety of summary forms while also making individual data viable is the use of computerized data bases. The largest such data base for post-secondary education was prepared initially by the staff of the National Commission on the Financing of Postsecondary Education (NCFPE). The Commission assembled data ranging from state scholarship surveys of financial aid recipients in California, New York, New Jersey, Pennsylvania, Oregon, Washington, and Illinois to the Higher Education General Information Survey. Using the data base, a student could derive his or her expected student aid package and other aid characteristics, for example. The data base is also capable of summarizing institutional information reported through HEGIS at a national, state, or institutional level as well as making accessible data on individual institutions.

The use of data bases to store information on postsecondary education and to increase manipulative capabilities can be expected to increase as awareness of the potential uses of information for management, planning, research and consumers increases.

RECOMMENDATIONS FOR FURTHER STUDY

This section of the paper presents an overview of the range of sponsorship and areas of information collection and reporting presently undertaken in postsecondary education. The comparability of data element definitions employed by different education associations, federal and state governments, and others was not evaluated. Information collection procedures on costs, student evaluations and institutional processes were also not considered. The range of data collection within each state and the use of systematic instruments were illustrated with examples but were not all inclusive by any means. All of these shortcomings are potential topics of study in a thorough evaluation of information collection instruments, definitions and reports. Further examination could be addressed to the potential of institutions to meet information requirements suggested by educational consumer groups from existing reporting structures, and to evaluate which existing instruments would be best suited to adopt new information collection to meet the expectations of consumer groups, funding agencies and others.

Such research could serve to keep to a minimum the need for new collection efforts and could therefore reduce the necessity for institutions to employ additional resources to meet the expectations of the diverse interests making information



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requests. The end result would be economy in expenditures for data collection, timeliness in responses to requests, and greater potential for comparability of information.

Institutional Reports

Associations of what information should be provided to students inevitably contain an element of uncertainty with repaid to what may fairly be expected from the institutions. The capability of institutions to report data containing certain types of information to educational consumers will be discussed in this section.

Types of information reported by institutions can be thought of in terms of institutional characteristics, student performance within the institution, follow up information on students after leaving the institution, and labor market conditions. Labor market conditions, while not the institutions' responsibility, can be reported to students from information shown to be available to institutions in the previous section.

The following examples of institutional reports illustrate some of the less traditional types of information that can be provided on institutional and student performance. Information traditionally reported tends to be resource-oriented. Reports include the costs of institutional programs, the student to faculty ratio, and other like information. Examples included here refer to student retention rates in courses, and progression rates from one class level to the next. While this choice of examples does not necessarily reflect a preference, it should be seen as an attempt to focus on some additional reports that institutions can generate from existing information resources.

INSTITUTIONAL CHARACTERISTICS

The following charts illustrate the kinds of information that are now available, and could be used by students in their decision-making about postsecondary education. While it is acknowledged that all of the information is not readily available to students in a form that would be most useful, nevertheless, coordination, rather than duplication, could produce the types of information needed in a form that could be used in educational decision-making.

 Course Retention, Progression, and Completion Rates

Figure I, "Course Retention Rates," (Illinois Economic and Fiscal Commission, 1973) illustrates how institutions in one state reported the percentage of students completing the courses in which they were enrolled at the beginning of the term. From records maintained by the institutions, the number of students receiving a grade for course completion was compared to beginning of term enrollments after drop deadlines.

Another state has elected to report information on student completion in terms of the progression rate of students from one class level to the next. Figure 2-a, "Report on Student

Progression through Class Levels," (Information Exchange Procedures, 1974) illustrates a report on what happens to students once they enter the institution. The probability of progressing to the next course level, based on the institution's historical records, remaining at the same course level, or transferring or dropping out altogether are reported by each of the public colleges in this state. Again, only basic institutional records on registration are required to provide the report.

A related report, Figure 2-b, "Report on Student Progression through Class Levels," (Liformation Exchange Procedures, 1974) digests the information from Figure 2-a to derive the likely future patterniof progression for each class level of students. Looking at the projections for sophomores, I year later eight will still have sophomore standing, 60 will have junior standing, and five will have progressed to senior classaevel standing. The column for completions indicates that after seven years, 22 of the original freshmen will have completed and 77 will have exited from the institution.

Course Selection and Manpower Priorities

Figure 3, "Student Enrollment by Manpower Priority," (Illinois Economic and Fiscal Commission, 1973) illustrates a report that can be useful both to students and the sponsoring agencies as the manpower priority of courses taught?" reported according to student enrollments. The state report on manpower needs can be broken down by the categories of course work related to particular manpower needs. With the information from the state report on the relationship of courses offered to manpower priorities of the labor market, each institution was able to proceed to breaking down course offerings according to the related manpower priority. The report indicates that enrollments are not necessarily aligned to the manpower needs of the state. Some reasons for the disparities shown between enrollments and manpower needs include lack of awareness of manpower needs by students, lack of counseling on the relationship between manpower needs, and courses, the availability of courses related to nameower needs, and the popularity of certain curricula. At Kaskaskia, 82.5% of the students in occupational courses appear to be preparing for jobs with a high manpower demand. At Dupage, however, 32.7% of the student enrollments are in courses where job skills are provided for high manpower

Long Range Planning and Course Selection

Institutions that have developed long range plans can be at an advantage in notifying students whether particular curricula are planned for deletion. In Figure 4, "Instruction Programs Intended for Deletion," (Illinois Community College Board, February 1975) curricula identified for phasing out can serve to notify prospective students of fields where manpower demand and student popularity may be waning. Some states have encouraged colleges to provide such reports of proposed deletions to encourage redirecting resources to new programs, or programs with expanding enrollments and greater popularity and/or relationship to manpower needs.



Faculty Characteristics

Figure 5-a, "Faculty Characteristics," (Information Exchange Procedures, 1974) describes some characteristics of an individual college faculty. In addition to the highest degree earned for academic faculty, many colleges with extensive occupational offerings will report the years of work experience possessed by faculty in the field in which they teach. Because of advances in teaching methods and a desire by many to enhance teaching effectiveness when working with disadvantaged and handicapped students, institutions can also report information on the number of faculty who have participated in in-service training programs for students with particular needs. Figure 5-b, "Faculty Development," (Information Exchange Procedures, 1974) represents a report provided for a state vocational education plan. The report provides information on, and projects teacher participation in special programs to improve their teaching ability within their vocational speciality, and also reports teacher participation in special programs to improve ability to work with students with special needs.

Graduate Enrollments

Figure 6, "Graduate Enrollments and Degrees," (U.S. Government, Dept of H.E.W., Office of Education, HEGIS, Students Enrolled for Advanced Degrees, 1974) illustrates

just one of the many reports that institutions provide to the federal government as part of the Higher Education General Information Series. This particular report covers graduate student enrollments by academic field for full and part time students by length of enrollment and sex. The duration of graduate enrollments has come under increasing scrutiny in recent years since the publication of a dissertation by David Breneman.

Breneman (1970) proposed that graduate departments seek prestige based upon the publication record of the faculty and the placement of successful graduate students in faculty positions at other prestigious colleges and universities. Of the many departments studied by Breneman, it was not uncommon to find that ten or more years of graduate study were undertaken for each doctorate awarded in the department.

Breneman suggested that departments could lower their number of years of graduate student enrollments which had little probability of yielding doctorates by screening students after the first year of graduate study, and then expecting those who remain to have a higher rate of completion. The report of students enrolled for advanced degrees can be compared with another institution-generated report for HEGIS on the number of advanced degrees awarded. Comparing the number of students with more than one year of graduate coursework completed to the number of degrees awarded can provide a qualified insight for prospective students into the department's performance in screening students and assisting mose students with several years of enrollment to complete their degrees.

Figure 1

COURSE RETENTION RATES

(Illinois Economic and Fiscal Commission, 4973)

COURSE RETENTION RATES, 1971-72 (Percentage of students receiving a grade indicating completion of the course)

Raskaskia 90	Name of Junior College	Overal1	0cap.	Bacc.	Remed.	Other .
Black Hawk 87(A) 85(A) 88(A) 45 90'A) Black Hawk East 90(A) 88(A) 88(A) 95(A) 85(A) Triton 98.6(A)	Kaskaski a	90 4			(· *- 🗸
Black Hawk East 90(A) 88(A) 88(A) 95(A) 85(A) Triton 98.6(A)	DuPage .	97	85	95 ·		
Triton Parkland 77 80(A) 75(A) 74 75(A) Sauk Valley 97.6 99.4 98.1 100 70 Danville 83 88 82 75 70 Chicago City 68 61 67 55 71 May fair 78.3	Black Hawk	87(A) ·)	85 (A),			
Triton Parkland 77 80(A) 75(A) 74 Sauk Valley Parvland 77 88 88 Sauk Valley Parvland 78 88 82 75 Chicago City 68 61 67 55 71 Mayfair Kennedy-King Farman	Black Hawk East	90 (A)	88(A)	~ (A)88	95(A)	85.(4)
Sauk Valley 97.6 99.4 98.1 100 70 70 70 70 70 70 70 70 70 70 70 70 7		98.6(A)		•		
Danville 83 88 82 75 70 Chicago City 68 61 67 55 71 Mayfair 78.3 83.1 Kennedy-King 75.8(C) 72.5(C) 79.1(C) 61.0(C) 67.0(C) Loop 66 62 79 92 91 Malcolm X 92 91 Malcolm X	Park land	77	80 (A)	75 (A)	- 74	75 (A)
Danville 83 88 82 75 70 Chicago City 68 61 67 55 71 May fair 78.3 83.1 83.1 83.1 Cop 66 62 79 92 91 Malcolm X	Sauk Valley	97.6	99.4	98.1	100 👛	 * .
Chicago City 68 61 67 55 71 Mayfair 78.3 83.1 Kennedy-King 75.8(C) 72.5(C) 79.1(C) 61.0(C) 67.0(C) Loop 66 62 79 92 91 Malcolm X Olive-Harvey 66.7(B) 66.7(B) 66.7(B) 66.7(B) 66.7(B) Southwest 67 67 65 57 , Wilbur Wright 79.6 80 80 75 75 Elgin 8 95(B) , Thornton 90(C) 91(C) 89(C) 85(C) 85(C) Rock Valley 90 90 90 84		83	88	82	75	
May fair 78.3 83.1 Kennedy-King 75.8(C) 72.5(C) 79.1(C) 61.0(C) 67.0(C) Loop 66 62 79 92 91 Malcolm X Olive-Harvey 66.7(B) 66.7(B) 66.7(B) 66.7(B) 66.7(B) Southwest 67 67 65 57 Milbur Hright 79.6 80 80 75 75 Elgin 95(B) Thornton 90(C) 91(C) 89(C) 85(C) 85(C) Rock Valley 90 90 90 84 HDG Rainey Harper Illinois Valley 87.5 92.8 84.4 79.9 92.5			61	67	5 5 -	71
Kennedy-King 75.8(C) 72.5(C) 79.1(C) 61.0(C) 67.0(C) Loop 66 62 79 92 91 Malcolm X		78.3	•• `		83.1	
Loop 66 62 79 92 91 MaIcolm X		75.8(C)	72.5(C)	79 _~ 1(C)	61.0(C)	67.0(C)
MaIcolm X Olive-Harvey 66.7(B) 66.7(B) 66.7(B) 66.7(B) 66.7(B) Southwest 67 67 65 57 Nilbur Wright 79.6 80 80 75 75 Elgin 95(B) Thornton 90(C) 91(C) 89(C) 85(C) 85(C) Rock Valley 90 90 90 84 Harvey Rainey Harper Illinois Valley 87.5 92.8 84.4 79.9 92.5			62		92	91
Olive-Harvey 66.7(B) 6		-,-		••	 -	
Southwest 67 67 65 57 Milbur Mright 79.6 80 80 75 75 Elgin 95(B)			66.7(B)	66.7(B)	66.7(B)	66.7(B)
Wilbur Wright 79.6 80 75 75 Elgin 95(B)			67	6Ś	57	,
Elgin 95(B)	7 /	79.6	.80 .	80	. 75	75
Thornton 90(C) 91(C) 89(C) 85(C) 85(C) Rock Valley 90 90 90 84 Proc. Rainey Harper Illinois Valley 87.5 92.8 84.4 79.9 92.5			''	'		
Rock Valley 90 90 90 84 Muc Rainey Harper Illinois Valley 87.5 92.8 84.4 79.9 92.5	•		91(C)	89 (C)	85 (C) '	85(C)
Mac Rainey Harper 111inois Valley 87.5 92.8 84.4 79.9 92.5				90	84 '	•
Illinois Valley 87.5 92.8 84.4 79.9 92.5				´		
		87.5	92.8	84.4	79.9	92.5
Illinois Central 88.6 89.4 86.9 90.8 92.8			89.4	86.9	90,8	92.8
Prairie State 74(C) 79(C) 70(C)	.			70 (C)		·
Naubonsee 92(C) 86(C) 92(C) 70(C) 95(C)					70(C)	95(C) _,

A Chief instructional administrator's estimate.,
B Chief instructional administrator's rough estimate.

C Chief instructional administrator apparently reported non-completion percentage rather than completion percentage. #e have included the residual rather than the reported percentage.

Figure 2 - a REPORT ON STUDENT PROGRESSION THROUGH CLASS LEVELS (Information Exchange Procedures, 1974)

NEBRASKA LEGISLATIVE FISCAL OFFICE UNIVERSITY NEB - LINCOLN PROGRESSION REPORT

1	FRESH- MAN	SOPH-	JUNIOR	SENIOR	UNCLAS- SIFIED	GRAO+ UATE	PROFES- SIONAL	COMP-	EXIT
FRESHMAN	0.0813	0.5485	0.0476.	ρ.0016	0.0018	0.0000	0.0087	0.0002	0.3103
SOPHOMORE	0.0024	0.0790	0.6043	0.0465	0,0021	҈0,0003	0.0058	0.0000	0.2596
JUNIOR	0.0005	0.0026	0.1524	0.6113	0 ,0021	0.0074	0.0086	0.0312	0.1839
SENIOR	0.0020	0.0000	0.0017	0.1824	0.0006	0.0628	0.0174	0,4211	0.3121
UNCLASSIFIED	0.0881	0.0466	0.0415	0.0466	0.0777	0.0207	0.0000	0.0259	0.6528
GRADUATE	0.0003	0.0003	0.0010	0.0010	0.0000	0.4661	0.0023	0.1911	0-3379
PROFESS I ONAL	0.0000	0.0000	0.0067	0.0189	0.0000	0.0022	9-6340	0.2125	0.1257

Note: The Progression report displays the probable distribution of students one year later from a base year enrollment status. The base year class level status is given in the first column. The distribution of enrollment class levels the following year is given in the columns with probability values. Example: One year later it can be expected that 0.3121 of all seniors will have exited the institution without completing a program and that 0.5485 of the preceding year freshmen will have attained sophomore status.

Figure 2 - b REPORT ON STUDENT PROGRESSION THROUGH CLASS LEVELS (Information Exchange Proceduces, 1974)

		. ,	UNIVE	LEGISLATIVE ! ERSITY NEB + ROGRESSION R	•		Z_{i}	•
FRESHMAN	FRESH MAN .	SOPH- OMORE	JUNIOR	SENIOR	GRADUATE	PROFESSIONAL *	COMPLETED'	EXIT
ENTER	100						•	
1 YEARS	8	55	_5′			, 1 '		31
2 YEARS	· 1	ື 9	-34	6.		1		49
3 YEARS		1	S 11 1	22.	1	1 .	4	6 ö
4 YEARS	•	14	્રું 2	11	, 2	1	14	_{1,} 69
SOPHOMORE			,	χ			•	
ENTER		100	`;	٠.	•		: '	~ "
1 YEARS	. هما	8	60 "	. • 5	•	1		26 ·
2 YEARS	**	1	14 7 : ,	38	. 1	1	4	41
3 YEARS	• • •		3	16	3	1	. 21 '	56
4YEARS	,	•	• 1	5.	2 .	1	28	63
	Age of the			•	•		. · · · · · · · · · · · · · · · · · · ·	· v

Note: The Columns denote the class standing of the student for the given number of years after entering at the given class level. The Exit Column denotes the cimulative total of students from the original 100 who have left the institution. For example, of 100 entering freshmen, three years later 22 are seniors, with 6 others having made senior standing 1 year earlier; 60 students have left from the original group of 100 without completing a program.

Figure 3

STUDENT ENROLLMENT BY MANPOWER PRIORITY

(Illinois Economic and Fiscal Commission, 1973).

PERCENT OF OCCUPATIONAL ENROLLMENT BY MANPOWER PRIORITY, FY 1972

۾گ ار					• • • • • • • • • • • • • • • • • • • •		Total Enroll.in
•		%A .	%B `	₹C	*D	%Other	Courses
•			•	\			
Kaskaskia		82.5	·9.8	2.0	5.8		2134
DuPage ~		32.7	18.4	14.9		34.2	15027 🌲
Black Hawk	-	42.0	25.5	23.2	3.6	5.8	6297
Triton -		. 52.8	• 19.5 °	25.9		1.9	12421
Park land		51.4	13,9	24.2	9.2	1.4	6775
Sauk Valley	,	54.3	17.0	17.1	10.6	1.1	3330
Danville Chicago City	• .	31.3	22.2	39;5	3.7	3.5	4123
Mayfair	. •	47.8		18.0	41	34.3	3803

Figure 4

INSTRUCTION PROGRAMS INTENDED FOR DELETION

(Illinois Community College Board, 1975)

*OCCUPATIONAL INSTRUCTIONAL PROGRAMS WHICH ARE INTENDED FOR FUTURE DELETION AS IDENTIFIED IN 1974-75 RAMP/CC SUBMISSION

TABLE 6

College	Curriculum	Field of Instruction
Black Hawk, Quad Cities	Chemical Technology	
Triton College	Safety & Emerg. Prep. ElectrOmechanical Tech. Instrumentation Tech. Indust. Mgmt. & Suprv. Metalworking Library Assistant Tech.	
Parkland College	Mechanical Technology	
Kennedy King (Chicago) Wilbur Wright (Chicago)	Industrial Technology Engineering Graphics)
Elgin Community College	•	Data Processing Technologies Public Service Technologies
Thornton Community College	Engineering Graphics	

Figure 5 - a FACULTY CHARACTERISTICS

(Information Exchange Procedures, 1974)

	Descriptor	Professor	Associate Professor	Professor	Lecturer/ Instructor	Teaching Assistant	Undesignated	Totals
	Full-Time		,					
$\cdot $	Part-Time				· _	- 25		
	Tenured			1 10	,	•		•
S V SEX	Average Full-Time Compensation	\$ /	\$.	\$	\$	\$	\$	\$
	Male	. 1						,
	Female			,				
	Asian American/ Oriental	- ,	, .	,	,—+.ı		,	
CATEGORY	Native American/ American Indian				•	<u>·</u>		•
ATEG	Negro/Black							
ر د	Spanish Surnamed				•			•
	All Others		4.					
	Doctorate	, ,	• •			, ,		
EARN	Master's				,			• •
DEGREE EARNED	Bachelor's						4	- · ·
	All Others			-				8

Figure 5 - b FACULTY DEVELOPMENT (Information Exchange Procedures, 1974)

12.1 Table XI - Current and Projected Enrollments in Pre-Service and In-Service Personnel Preparation and Development

Vocational Programs Specified by O.E. Code	Pr	e-Servic	. <i>j</i>	In-Service			
	1974	1975	1979	1974	1975	1979	
Grand Total - Unduplicated	624	'৫১১	724	1854	1965.	. 2433-	
Ol. Agriculture	32	38	38	180	180	200	
04. Distributive Ed.	13	28	32	50	•60	100	
07. Health	0	5	10	92	105	120	
09.01 Comp. Homemaking	124	125	133	210	210	210	
09.02 Voc. Homemaking	27	22	24	10	10	10	
14. Off. Occupations	80	108	111	' 220	260	270	
Disadvantaged		, ,		_			
Handicapped	68	, 70	70 🔪	199	215	22 8	
Remedial	0	0	0	0	. 0	0	



Figure 6

GRADUTE ENROLLMENTS AND DEGREES

(U.S. Dept. of HEW, OE, "Higher Education General Information Survey," [Students Enrolled for Advanced Degrees] 1974)

NAME OF	INSTITUTION	•		ı	_		1. INST	TÚTION	00E NUA	MBER .	
	PART B - BACHELOR'S	MASTER'S.	AND	росто	R'S DEGI						
COOE	OISCIPLINE SPECIALTY (major field of study)			LINE NO. (Circle if new this	OF	NUME ELOR'S GREES g 45 years		AASTER'S DEGREES		DEGRI	228
m l	(2)		year) (3)	MEN (4)	WOMEN	MEA (6)	WON	_	EN I	VOMEN	
<u> </u>			LETTE	RS (1500)		1	<u>ک</u>		<u>`L_</u>	<u></u>	,
1501	English, general			288						· \	\
1502	Literature, English	1		289		7					
Į303	Comparative Interature	1 -		290				ŀ			
1504	Classics			291.							<u></u>
1505	Linguistics (include phonetics, semantics, ar	d philology) =		292			• /				
	PART B - STUDENTS ENRO	LLED FOR				-					
		- LINE NUMBER	FUL	L YEAR (GRADUA	LESS THA OF REQUIR TE STUDY	RED .	Υ.	PLETED C EARS DF R GRADUAT	EQUIRED	ORE.	TOTAL
CODE	DISCIPLINE SPECIALTY (Major field of study)			(Major Hald of shudy) If new ATTENDANCE STATUS ATTEND		TENDANG	E STATU		(Sum of rotumns ((())-(())		
1			MEN	MOMEN	. MEH	WOMEN	MEN	WOMEN	MEN	HOMEN	
(1)	<u> </u>	(3)	14)	(5)	(6)	(7)	(5) -	(9)	(10)	(11)	an ?
1501	English, general	315	LET	TERS (15	,			•			
1502	Literature, English	316		·	,		·			_	

317

318

LABOR MARKET PROJECTIONS

1503

1504

Projections of labor market supply and demand are included in many state plans for vocational education (South Carolina, State Board for Technical and Comprehensive Education, 1974; Illinois Board of Vocational Education and Rehabilitation, 1974; State of Nebraska Department of Education, 1974). These state plans are prepared in part to meet guidelines for federal support of vocational education. Research units may make annual surveys of employers and vocational education program enrollments — secondary and postsecondary and other instructional training programs — to assess the demands for and the supply of skilled manpower. To provide for comparability in the descriptions of manpower groupings and occupational training fields, taxonomies for job titles and occupational training fields have been prepared by federal government agencies.

Figure 7, "Manpower Projections," (State of Nebraska Department of Education, 1974) and Figure 8, "Manpower Projections," (State Plan for Vocational Education, 1974) provide

two examples of annual state reports on surveys and projections for manpower.

Information on current employment in the occupational field, projected demand, and the supply of trained manpower from vocational courses and other labor sectors are given in the report shown in Figure 7. A summary report on manpower needs from another state has been included in a community college annual plan illustrated in Figure 8.

The Fund for the Improvement of Postsecondary Education of the Department of Health, Education, and Welfare has supported a project in Oregon called the Career Information System (CIS) that enables students to have access to information on employment opportunities, to compare student interests with employment skills and to identify institutions that provide instruction in occupational fields of interest to the student (Oregon Career Information System, 1974). It is anticipated that states that have employment information can use the CIS to make information available to more students and in coordination with other student information needs.



MANPOWER PROJECTIONS

(State of Nebraska Department of Education, 1974)

			Projected Labor Supply					
Instructional Program	Current Employment	Projecto Dema			al Education		Sectors tput	
		1975	1979	1975	1979	1975	1979	
Dental Laboratory Technician	198	99,	ຶ 102	19	. 23	0	0	
Medical Laboratory Assisting	1,286	200	302	18	. 22	. 0	0	
Practical Nurse	13,593	2,563	3,727	503	603	_0	0	
Nurses' Assistance	3,000	219	333	76	o · 91	, 12	12	
Medical Assistance	80	8		24	28	0	١٠	
Managerial, Professional and Other	8,521	724	1,324	4	5	. 0 -	0	
SUBTOTAL	27,810	3,988	5,998	772	925	65	69	
Accounting and Computing	16,902-	1,996	2,713	178	213	104 -	117	
Business Data Processing	6,768	890	1,263	70.	84	30	41	
General Clerical	. 37,115	6,153	9,249	1,477	1,772	187	207	
Information, Communications Occ.	13,815	1,059	942	50	60	<u> </u>	0	

Figure 8 MANPOWER PROJECTIONS (State Plan for Vocational Education, 1974)

Occupational Manpower Projections*

SUMMARY REGIONAL OCCUPATIONAL STRUCTURE 1970-75-80 STATE TOTALS

	•	•	•
OCCUPATION	1970	1975	. 1980
PROF. TECH. & KINDRED	560,388	609,115	670,652
Engineers	84,837	88,458	96,358
Natural Scientists	18,236	19 /993 😉	21,617
Math. Spéc.	7,876	8,550	. 9,406
Med. & Health Prof.	89, 195	99,129	110,178
Health Tech.	19,851	22,057	24,603
Social Scientists	103,942	117.028	131,238
Other Professional	54,062	59,345	65,378
Eng. & Scien. Tech.	83,924	88,393	96,215
Writers, Artists, etc.	41,388	44,641	48,085
Other Prpf., Tech. NEC	56,875	61,522	67,575
MANAGERS & ADMINISTRATORS	541,148	584,186	635,567.
SALES WORKERS -	368,117	393,421	423,909

^{*}Table taken from "Occupational Manpower Projections, State of Illinois Office of Planning and Analysis; February, 1973)



1...

• STUDENT FOLLOW-UP

Figures 9 through 19 illustrate the range of topics that represent follow-up reports on students after their departure from the collegiate setting. Reports on student attitudes toward themselves, toward the education provided, on performances on licensing examinations to qualify for employment in particular specializations, and on performance in the labor market with regard to education-related employment and income are included in the examples.

Student reported reflections upon contribution of the collegiate experience to their cognitive and affective growth is illustrated in Figure 9, "Senior Survey," (State-University of New York — Plattsburg, October 1974). Students were asked a series of questions relating to intellectual, social personal, educational, and vocational/professional growth. Norms were generated based upon the total of students participating in the survey. Because the particular survey instruments have been developed which can be used to compare the attitudes of students at any one institution with student-perceived attitudes at other types of institutions.

One indicator of student achievement and the performance of the institution in providing necessary skills for employment is the record of graduates on licensing examinations (Illinois Economic and Fiscal Commission, 1974). In the example given in Figure 10, "Graduates Performance on Licensing Examinations," each of the state community colleges preparing student in a registered nurse curricula reports on student performance on state licensing examinations. The number of students taking the examination can be compared in turn with the number of students beginning the curricula to assess the attrition rate as well as reporting the success of students on the examination and the number of attempts required for passage.

A questionnaire to spring term completers with regard to time required to complete their program, their current employment status, and their plans for further education is used by institutions participating in the NCHEMS' Information Exchange Procedures project (Information Exchange Procedures, 1974). Student responses to the questionnaire form the basis of institutional reports that are made available among the cooperating schools. An illustration of the reporting form used by the cooperating institutions is provided in Figure 11, "Student Program-Related Information: Outcomes." Information on program completers can be broken down by major area of study with the use of the IEP format.

A similar report on students in occupational education programs for a state-supported system of two-year colleges is presented in Figure 12, "Occupational Student Follow-Up," (State of Nebraska Department of Education, 1974). The information on occupational students is derived from an annual report that colleges submit for reimbursement from the federal government for vocational programs.

Many colleges perform follow-up surveys of alumni several years after the students leave the institution. Examples of reports on longer term alumni follow-up are illustrated in figures 13 through 16.

Students who reached alumni status in 1970 and 1971 were surveyed in 1972 at one college to monitor their employment and education status, as shown in Figures 13-a and 13-b, "Present Employment or Education Status, Goals, and Occupational Field," and "Employment, Salary, Location, Further Educa-

tion," (Follow-up Study of 1972 Alumni, 1973). For those who are employed, occupational field, level of employment, annual salary and job location were elicited. Alumni who pursued further education were asked to report the college of their attendance.

A description of what kinds of information can be reported by institutions to emphasize the relationship of job market opportunities to instruction is given in Figures 14 through 17 (Annual Placement Report, Milford Campus, 1973-74, 1974). The number of specific job openings brought to the attention of the college placement office for which the college's students would qualify is reported in Figure 14, "Placement Survey: Job Openings and Placement." The college also reports the number of students who actually achieve completion of a program, and of those who complete, the number who have gained employment by the time of the survey date are shown has a separate category, called "other." Through the use of further follow-up the college later was able to solicit response from 60 of the 80 persons in the "other" category, all of whom were employed. The institution breaks out the employment' status of program completers by major instructional program category in Figure 15, "Placement Survey: Employment Status and Salary of Program Completers," and includes the average wage at graduation for each of the instructional categories. Through the efforts of an annual follow-up of former students, the institution keeps in contact with alumni to assess changes in occupation and salary earned. Follow-up information on income is illustrated in Figure 16, "Placement Survey: Trends in Salary of Past Program Completers," by program of instruction.

In addition to reporting the income of program completers, the institution also keeps track of where the alumni locate for their employment. The number of job offers from each of the communities for each of the occupational groupings is compared to the number of alumni taking employment in that community in that occupation. The total of job offers reported in Figure 14 then is broken down by occupation and community in Figure 17, "Placement Survey: Employment Location." As noted in the illustration, the top number in each box denotes the number of jobs taken by alumni in a given year and the bottom number reflects the number of job opportunities reported by the placement office.

Figure 18, "Proprietary School Follow-Up," illustrates a student follow-up report prepared by a proprietary institution that provides occupational instruction to students throughout the nation (Survey of Student Success and Satisfaction, 1974). The examples taken from the report refer to progression of students who utilized federally insured loans to finance their tuition, student reporting ratings of the training programs, and employment mobility of program graduates.

Figure 19, "Occupational Student Follow-Up," is taken from a standardized evaluation instrument for institutions with students enrolled in occupational curricula (Hoyt, undated). The instruments' sponsors emphasize the use of the report as an aid to potential students in assessing the attributes of a given institution, as well as the adaptability of the report for use by institutional planners and managers.

The illustrations indicate that institutions can monitor the progress of students while enrolled and after students achieve alumni status. Labor market conditions can be projected and related to the course offerings of the institutions. Standardized questionnaires for student attributes on personal development can be utilized. Performance on licensing examinations, and further education and employment success can be monitored and related back to instructional program areas. Reports to a federal agency for vocational education cost reimbursement can be reorganized to derive information for examination by the institution and for reporting on student performance after departure from the institution;

fience, reports on performance do not necessarily entail new data collection. Standardized reports that are as wide ranging as those on vocational education and graduate enrollment and degrees can be reorganized to derive information that can be employed to monitor institutional performance, provided the use of commonly defined data elements and collection instruments.

Figure 9 SENIOR SURVEY

(State University of New York, Plattsburgh, 1974)

Table 8. Senior Survey - December 1973 - Comparison Between Growth Expectations (EXP) and Growth Achievements (ACH). "Weighted Average of Responses" by Faculty

	Intell Gro		Soc Gro			. Pers Gro	onal wth	Educat Gro	lonal wth		Prof wth_
Major	EXP	ACH	EXP	ACH		EXP	ACH	ĒXP	ACH	EXP.	ACH
All Majors	3.77	3.62	3.55	3.73	1	3.40	3.40	4.17	3.82	3. <u>8</u> 9	3.40
Professional Studies	3.82	3.65	3.53	3.83		3.44	3.44	4.22	`3.93	4.16	3.83
Humanities	3.64	3.57	3.64	3.68	`~	3.32	3.27	4.09	3.73	3.68	3.33
Science and Mathematics	3.45	3.40	3.15	3.16		3.25	3.20*	3 .5 5	3.45	3.05	2.80
Social Science	3.68	3.53	3.48	3.56		3.26	3.29	4.09	3.63	2.87	3.09
General Studles**	3.58	3.50	3.67	3.83	•	3.25	3.17	4.17	3.75	4,00	3.33

Figure 10 g GRADUATES PERFORMANCE ON LICENSING EXAMINATIONS

(Illinois Economic and Fiscal Commission, 1973)

PERFORMANCE OF JUNIOR COLLEGE GRADUATES
DEPARTMENT OF REGISTRATION & EDUCATION LICENSE TESTS

REGISTERED NURSES

	Fi	First Testino - Subsequent Test						
Name of	January	- Septe	mber 1972*	January - September 1972				
Junior College	Total	<u>Fail</u>	5 Fail	Total	<u>Fail</u>	3 Fail		
Kaskaskia	5	3	60%	4	0	0%		
DuPage	47	1	24	5.	2	40%		
Black Hawk	37	15	41%	13	5	393		
Triton	53	2	4%	5	1	20%		
Parkland	34	7	21%	5	ī	20%		
Sauk Valley	25	5	20%	4	2	50%		
Chicago City			•		- :-			
May Fair	. •59	10	17%	26	11.	43%		
Kennedy-King	33	18	55%			-		
Malcolm X	53 ,	27	51%	23	10	44%		
Olive-Harvey	51	12	24%	•	• • .			
Elgin	13	3	24% 23%	2	1	505		
Thornton	70	21	30%	10	4 6	4D%		
Rock Valley	1 '	0	0%		•			

*Weights Assigned: Blank (b) = 0; None = 1; Low = 2; Moderate = 3; High = 4; Very High = 5 **Only Twelve Responses



Figure 11'
STUDENT PROGRAM-RELATED INFORMATION: OUTCOMES
(Information Exchange Procedures, 1974)

HEGIS Code	Program Name and Degree Type	Minimum Number of Equivalent Semester Credits Required to Complety Student Program [®]	Mean Number of Equivalent Semoster Credits Actually Completed	"edian Number of Calendar Months Elapsed To Completion (Quest	Number of Completers Employed (Quest. #3)**	Number of Completers Sceking Employment (Quest. #5)**	Number of Completers Applying for Admission to Another Educ. Program (Quest. #6)**	Number of Completers Admitted to Another Educ. Program (Quest. #7)**
					•		, J	
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		,						,

^{*}Previously not required.

Figure 12 OCCUPATIONAL STUDENT FOLLOW- UP (State of Nebraska Department of Education, 1974)

REPORTED FOLLOW UP ON OCCUPATIONAL STUDENTS FOR FY 1972

	20			Known To 2e	Known Employs
Junior College	Totel Occup. Students (Undunlicated)	AAS and Certificates Awarded 2	1 Formal Completion	Continuing Education At Higher Level	Full-Time 1: Trained or Re- lated Field
Kaskaskia	~ 357	109	30.5%	4	122
tulage	2836	408 -	14.48		• •
Black Hawk (1366-12.5)	. 1213	171	14.13	42	278
Slack Hawk Eest	153	52	34:0%		••
Triton	5466	425	7.7%	27	225
Park!and	2031	269	13.2%	22	184
Sauk Valley	615	145	23.5%	' 16	. 125
Danville	1342	157	11.78	16	89. ,
Chicago City	(30067)	••	(3,9%)	••	
Hayfalr	704	82	11.6%		88
Kennedy-King	4816	85	1.8%	79 `	20 2,
Loop	9228	170	1.8%	298	3054
Haicolm X	3013	121	4.0%	36	81
Olive-Harvey -	3012	240	8.0%	44	55
Southwest	6551	29	0.4%		107

^{**}Based on questionnaire administered to spring term compilers:

Figure 13 - a EMPLOYMENT, SALARY, LOCATION, FURTHER EDUCATION (Follow-up Study of 1972 Transfer Alumni, 1973)

	. ,	•	Year Reached Alumni Status						
			1970	1971	1972				
Level of Em	ployment	v	Percent	Percent _	Number 🙀 Percent				
Status		<i>'</i>		•	₩.				
Rating	Status Description				127				
1	Unskilled labor		9.5	14.3	9 * 7.7	,			
2	Semi-skilled labor		20.6	30.0	31 26.5				
3	Technician - skilled labor	-							
	foreman		22.2	⁵ 15 ; 7	18 3 15.4				
4	Beginning professional		34.9	31.4	18 15.4 38 32.5				
5	Experienced professional -	secon	d	•					
	line supervisor	•	12.8	.4.3	13 . 11.0				

Annual Salary					•		
Up to \$ 5,000 .			,	20.3	33.8	.26	22.0
\$ 5,000 - 5 7,000	- «	-	·	35.6	30.8	30	25,4
\$ 7,000 - 5 9,000	#			13.6	10.8	28	23.8
\$ 9,000 - \$10,000				8.5	10.8	7	5.9
\$10,000 - \$12,000				. 10.2	6.1	9	7.6
\$12,000 - \$15,000	•			3.4	4:6	12	10.2
\$15,000 - \$20,000				8.4	3.1	· 3 ()	2.5
\$20,000 - \$25,000				. 0	0	1 3	. 9
Over \$25,000		,		. 0	0	2 ,	1.7
				100.0	100.0	118	100.0

Job Location			
Downtown Chicago	6. r.	8,85	4.1
Outer fringes of Chicago	9.1	2.9	9:8
Northwest subughs	* 63.6	53.0 🥯 🗀 69	56.6

Education Information

		- Yea	ar Reached A	lumni Stat	us
• •	4.4	1970	1971		72
College or University Enrolled In	· •	Percent	Percent	Number	Percent
Northern Illinois		33.6	29.0	97 .	26.4
Northeastern Illinois	₹,	2.1	7.6	29	7.9
Harper '.	• •	11.0	3.0	[©] 28	7.6
University of Illinois - le		9.6	9.3	26	7.1



Figure 13 - b PRESENT EMPLOYMENT OR EDUCATION STATUS, GOALS, AND OCCUPATIONAL FIELD

(Follow-up Study of 1972 Transfer Alumni, 1973)

Summary of Results

			73
1-4			
Year	Reached	Alumni	Status

,	9.50	1970	1971	19	72
Present Status		Percent	Percent	Number	Percent
Employed full-time - occupation prepared	for	9.7	2.7	19	2.9
Employed full-time - related occupation		6.7	13.1	56	8.5
Employed full-time - not related to educa	tion	11.3	12.1	166 ,	25.0
Enrolled in college full-time		58.6	. 58.4	349	52.7
Educational Goals		A CONTRACTOR	**	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•
Presently enrolled full-time in college		60.3	60.4	- 363	54.8
Presently enrolled part-time in golfege		-4,7	8.6	66	9.9
Plan to return to college mext dear.		14.3	9.0	. 77	11.6%
Classification of Present Occupation		•			etre.
Occupational Field Business or finance		22.2		46	31.9
Sales	• (22.2	77.1	27	18.8
Factory or semi-skilled		4.2	15.7	15	10.4

PLACEMENT SURVEY: JOB OPENINGS AND PLACEMENT (Annual Placement Report, Milford Campus, 1974)

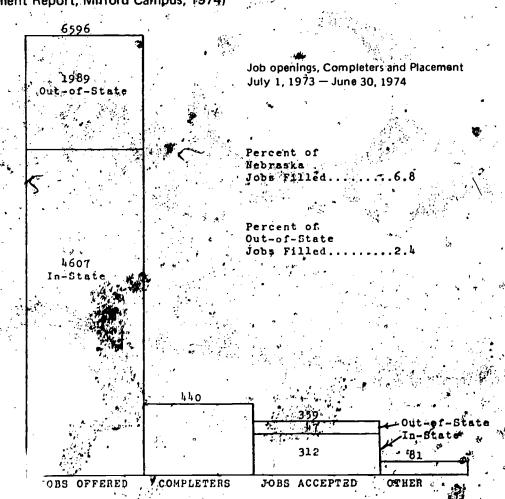


Figure 15

PLACEMENT SURVEY: EMPLOYMENT STATUS AND SALARY OF PROGRAM COMPLETERS

(Annual Placement Report, Milford Campus, 1974)

SOUTHEAST COMMUNITY COLLEGE Employment of 1973-1974 Completers

DEPARTMENT	TOTAL	III-	STATE	OUT-	-ÒF-ST.	MILI	TARY	NOT	REP.	RET.	TO SCH.	AVERAGE WAGE AT GRADUATION
		1,0.	- 7	FO.	<u>, , , , , , , , , , , , , , , , , , , </u>	Jio.	7	10.	5	101		MOUTHLY
AIF CONDITIONING	35	20	57.2		11.6			11	31.5		<u> </u>	567.00
SO BODY	31	23	74.3	3	9.5		-	5 '	16.1			549.00
AUTOMOTIVE.	56	1.5	82.2	_ 1_	1.6	<u>.</u> .	-	9	16,2	_		571.00
BUILDING CONST.	35	33	85.7	5	5.7			3	8,6	_		601.00 -
COMMERCIAL APT	. 5	· 3	€0.0	-	-		_	2	1:0.0		T	
DATA PROCESSIVS	18	15	83.4					3	16.6	_		546.00
DIECEL .	54.	14:4:	.61.4	l:	7.1		-	. 5	9.2	1	2.3	596.00
ARCHITECTURAL PETH.	38	28	13:4 13:4	5	د د ت		_	. 5	13,2	_	1	567.00

Figure 16 .

PLACEMENT SURVEY: TRENDS IN SALARY OF PAST

PROGRAM COMPLETERS

(Annual Placement Report, Milford Campus:1974)

DEPARTMENT	AVERAGE WAGE AT GRADUATION	AVERAGE WAGE AFTER 1 YEAR	AVERAGE WAGE AFTER 5 YEARS
	MONTHLY	WOMITHTA ,	MONTHLY
AIF CONDITIONING	567.00 .	661.00	1070.00
YOCH OTUA	549.00	583.08	960.00
AUTOMOTIVE	571.00	744.00	926.00
BUILDING COUST.	601.00	666.00 5 T	975.00
CONTERCIAL APT		A 0	-
DATA PROCESSING	546.00	656,00	1010.00
DIESEL	596.00	755.00	969.00
ARCHITECTUPAL TECH.	567.00	609.00	.958.00
*			

Figure 17
PLACEMENT SURVEY: EMPLOYMENT LOCATION
(Annual Placement Report, Milford Campus, 1974)

IN-STATE JOB OPENINGS & PLACEMENT

The top figure represents jobs accepted by graduates.

The lower figure represents jobs offered by employers

				D F	E P,	A R	T 1	E	n T	s,	•		·			;	•
	AIR CONDITIONING	AUTO BODY	AUTOMOTIVE	BUILDING CONSTRUCTION	COMMERCIAL ART & ILLUSTRATION	DATA PROCESSING	DIESEL	ARCHITECTURAL TECHNOLOGY	CIVIL TECHNOLOGY	MECHANICAL (NFG) TECHNOLOGY	ELECTRICAL	ELECTRONICS	INDUSTRIAL SERVICES	INDUSTRIAL PLASTICS	MACHINE & TOOL TECHNOLOGY	WELDING TECHNOLOGY	TOTALS
ATKINSON			1				1	, <u>, </u>			2		*		<u>.</u>	6	1 14
AUBURA	1	- 5		1 11			6	1			.2				3		1 32
AURORA	1 5	/3		15			3	1	i	1	ნ,			5	2	ų	2 51
BASSETT	1		. 1 3 ₁					·			2	(e	·				1 3
BAYARD) 		,		2	,		,				·	1		3
BEATRICE	2,	6	8	2	1	2	16 ¹	3	1 3	· 6	.5	6	. 2	,	3	11	_769
BELLEVUE	•	1	2					3	1			1;	·			2	1 9
BENNINGTON							1						0				- 1
BLAIR	14		8	15	ça i e		2		4			1	14	tiser of	- li	13	.51
BLUE HILL			1				ı			,					·, '	ť	2
BRADSHAW											ν,	,				,	1

PROPRIETARY SCHOOL FOLLOW - UP

(Survey of Student Success and Satisfaction, 1974)

Academic Status

The 1973 study showed that for students who obtained their loans originally from ASI, '

40.9% of the students already had been graduated;

12.1% were actively engaged in lessons;

5.9% were inactive but still enrolled;

-37.0% of the students had been terminated for academic

4.1% were terminated at student request.

Students who originally obtained their loans from others yielded the following similar results:

44.1% of the students already had been graduated;

9.8% were actively engaged in lessons:

3.3% were inactive but still enrolled;

39.8% of the students had been terminated for academic reasons;

3.0% were terminated at student request.

In addition, the students who are still active have completed 72% of the total possible lessons, indicating the final graduation

11,116 graduates showed their confidence in the quality of the training they had received-28.5% rated it as excellent.

35.7% —very good

9.7% — fair

22.5% --- good

3.7%-poor

Time after graduation	Changed Job	Received Promotion	Increased Income	
6 months	14%	9%	32%	
7-12 months	25%	19%	45%	
13-18 months	23%	20%	. 56%	

Figure 19 OCCUPATIONAL STUDENT FOLLOW - UP (Hoyt, undated)

F	5 EVALUA	TION OF EQUIPM	MENT		
		Percent	of Students Ratin	g It As	•
Judgments Made On Condition of equipment Variety of equipment Amount of equipment Spacing of equipment Cleanliness of rooms	Very High 23.3% 25.7% 19.8% 51.9% 47.6%	High 60 • 2% 60 • 4% 49 • 5% 39 • 2% 46 • 6%	Average 10.7% 11.9% 27.7% 5.9% 5.8%	Below Average 3.9% 0.9% 1.9% 2.9% 0.0%	Very Low 1.9% 0.9% 0.9% 0.0%

	Percent of	· ·			
Judgments Made on Knowledge of Instructors	Very High 58.3%	High 41.8%	Average 0.0%	Below Average 0 • 0%	Very Low
Ability to Answer Questions of Students	60.25°	38.8%	1.0%	0.0%	0.0%
Ability to Demonstrate the skulls they teach	57.3%	33.9%	7.8%	0 (U ঠ	0.9%
Degree to which they know students well	22.6%	33.3%	27.5%	11.8%	4.9%
Ability to Teach .	38.69	48,5%	9.9%	1 • Ýs	0.9%

111 How did the jobs former students found compare to those they had expected to find?

15.7% said the jobs they found were "better than expected"

39.4% said the jobs they found were "about as expected".

31.5% said the jobs they found were not "as good as expected"

13.1% said this question doesn't apply to them

Data Elements

A brief outline of illustrative data collection data elements and the sponsoring agencies follows. Examples from federal and other national agencies, state and local efforts are included.

Where common data element definitions exist and the collection cycle for information components coincide, it is conceivable to match aspects of one report with another for analytical purposes. Such cross-comparisons of compatible reporting instruments with common element definitions can enhance the usefulness of the total information collection effort as shown in Section II in the discussion of graduate enrollments and degrees.

Information

HIGHER EDUCATION GENERAL INFORMATION SURVEY

(U.S. Government, Dept. of H.E.W., Office of Education, H.E.G.I.S. a-f, various dates)

A. Financial Statistics

- 1. Revenues
 - a. Student Tuition and Fees
 - b. Governmental Appropriations-Federal
 - c. Governmental Appropriations-State
 - d. Governmental Appropriations-Local
 - e. Endowment Income and Private Gifts
 - f. Sponsored Research by Governmental and Non-Governmental Sources
 - g. Other Research
 - h. Recovery of Indirect costs.
- 2. Student Aid Grants by source of funds
- 3. Other-Hospitals, Housing and Food Service, other auxiliary enterprises
- 4. Expenditures .
 - a. Instruction and Departmental Research
 - b. Organized Activities
 - c. Sponsored Research
 - d. Other Separately Budgeted Research
 - e. Libraries
 - f. Extension and Public Service
 - g. Physical Plan Maintenance and Operation
 - h. Student Aid Grants-total
- 5. Physical Plant Assets for the Fiscal Year Land Buildings, Equipment
- 6. Endowment by Food and Market Values, Earnings, and Realized Gains

B. Degrees and Other Formal Awards Conferred

- 1. First Professional Degrees Conterred in Selected Fields by field of study
- 2. Bachelors, Masters, and Doctors Degrees-by sex. by academic discipline
- 3. Degrees and Awards Based on Less than 4 years of Work
 Beyond School—Associate Degree, occupational and
 creditable toward a Bachelors degree of the formal
 recognition such as certificates, curricultums of at
 least 1 year but less than 2 years such as diplomas

C. Opening Fall Enrollment in Higher Education

- 1. First Time Students
- 2. Undergraduates by class level
- 3. Unclassified Students
- 4. First-Professional Students
- 5. Graduate Students—all by sex, full and part-time, and full-time equivalency

D. Institutional Characteristics of Colleges and Universities

- 1. Regional Accreditation
- 2/ Accreditation by Professional Associations
- 3. Types of Programs—occupational, associate, baccalaureate credit, liberal arts, teacher prep, professional
- 4. Enrollments by Type of Program
- 5. Minimum Requirement for Admission
- 6. Basic Student Charges—tuition and required fees and room and board charges

E. Students Enrolled for Advance Degrees

1. Students Enrolled for First, Professional Degrees in

Selected Fields-by length of program completed

- 2. Students Enrolled for Master, and Higher Degree by length of graduate study completed for full and parttime students, and by sex for academic departments length of graduate study completed for full and part-time students, and by sex for academic departments and disciplines
- F. Salaries and Fringe Benefits of Academic Deans and Full Time Resident Faculty—by rank, by sex
- G. College And University Libraries
 - Number of Volumes in Book Stock and Bound Periodicals
 - 2. Linear Feet of Government Documents
 - 3. Valume Equivalents of Microform
 - 4. Number of Periodicals Currently Received
 - 5. Motion Pictures-films, cassettes, tapes and video tapes
 - 6. Audio Recordings-discs and tapes
 - 7. Filmstrips
 - 8. Seating Capacity

U.S. OFFICE OF EDUCATION

(U.S. Government, Dept. of H.E.W., a-e, various dates)

A. National Direct Student Loan Program

- 1. Number of Borrowers during the fiscal year
- 2. First Time Borrowers
- 3. Number Making Payments for First Time
- 4. Accounts Past Due for Those in Repayment Status
- 5. Accounts in Process of Repayment

3. Supplemental Opportunity Grants

- Number of Recipients and Total funds—available by initial and renewal year status of students.
- 2. Funds Used to Match SEOG

C. College Work-Study

- 1. Total Student Compensation
- 2. Federal and Matching Shares
- 3. On and Off campus employment
- 4. Number of Students Employed

D. Institutional Fiscal Operations Report for SEOG; College Work-Study and NDSL

- 1. For Each Federal Program:
 - a. number of student recipients
 - b, amount
 - c. race or ethnic group
 - d. sex
- 2. Number of Aid Recipients and Amounts Spent by income category independent or graduate status during the fiscal year for each federal program

E. Adult Education

1. Enrollments by Sex and Race

NATIONAL CENTER FOR HIGHER EDUCATION MANAGEMENT SYSTEMS—INFORMATION EXCHANGE PROCEDURES, 1974

- 1. Student Demographic Information
 - a. full and part time
 - b, age distribution
 - c. sex,
- d. civil rights ontegory
- e. financial aid applicants, recipients, and support by graduate, undergraduate and non degree
- 2. Faculty
 - a. full and part time and tenured
 - b. average full time compensation

- c. sex
- d. civil rights category
- e. highest degree earned by rank: professor, associate, assistance, lecturer, teaching assistant
- 3. Direct and Fully Allocated Cost—by Program Classification Structure and Sub-program
- 4, Unit Cost information—by instructional discipline and course level
- 5. Activity and Outcomes Summary
 - a. number of program completers
 - b. percentage employed of those seeking jobs
 - c. average annual gross salary
 - d. percentage admitted to another educational program of those seeking admission
- 6. Student Enrollment—by course level and full and part time for headcount
- 7. Enrollment—by new, transfer, continuing, readmitted, exiting
- 8. Student Financial Aid-by course level and family income category
- 9. Student Entrance Exam Information, SAT and ACT
- 10. Student Fee Information
- 11. Instructional Personnel—by rank, full and part-time and highest degree earned
- 12. Assignable Square Feet of Room Use Categories—by program designation
- 13. Direct Costs—by object of expenditure
- 14. Current Revenues by source
- 15. Student Program Related Information
 - a. required credits for program completion
 - b. actual average hours completed
 - c. median calendar months elapsed to completion of program
 - d. number of completers employed
 - e. number of completers seeking employment
 - f. number of completers applying for admission to another education program
 - g. number of completers admitted to another education program
- 16. Outcomes from Student Questionnaire—human relations scale, humanities scale, critical thinking scale and vocational scale by program name and degree type

STANDARDIZED QUESTIONNAIRES

A. NCHEMS Student Outcomes Questionnaire for Program Completers

- 1. Time to Completion
- 2. Current and Long-run Occupational Plans and Activities a. salary or wage, full or part time, feelings toward job
 - b. future educational plans
- Evaluation of the educational institutions contribution to the students intellectual growth, social growth, aesthetic and cultural growth, education growth, vocational and professional growth, personal growth.
- 4. Importance of growth in the areas described above.
- B. Research and Development Center at the University of California at Los Angeles

(Higher Education Measurement and Evaluation ICF, undated)

- 1. Measures of Student Development, Progress and Attainment.
 - a. General Culture
 - b. Attitudes about major social issues
 - c. Program toward the attainment of broad objectives and benefits

- 2. Measures of Educational Processes and Contexts
 - a. measures of the college environment
 - b. learning styles
 - c. campus experiences
- 3. The Student Body
 - a. academic orientation
 - b. cosmopolitanism
 - c. personality traits and dispositions.
 - d. values and priorities ...
- 4. Teacher and Course Evaluation
- C. American Council on Education-University of California at Los Angeles Survey of College Freshpersons
- D. Educational Testing Service
 - 1. Institutional Goals Inventory (Petersen, undated)
 - 2. Course and Faculty Evaluation Survey Instruments

STATE INFORMATION SYSTEM REPORTING STRUCTURES

(Illinois Community College Board, 1975)

A. Illinois Resource Allocation and Management Plan for Community Colleges

(Illinois Community College Board, 1975)

- 1. Projected Percentage Change of Major Occupational Groups from 1970-1980
- 2. Occupational Manpower Projections
- 3. Career Program Additions and Deletions by College
- 4. Occupational Program Additions and Deletions
- 5. Occupational Instructional Programs which are Intended for Future Deletion as Identified in 1974-75 Submission
- 6. Future Needs for Career Programs
- 7. Baccalaureate-oriented Programs by College
- 8. Discipline Areas in which Colleges Wish to Add Courses
- 9. Enrollment Projections
- 10. Number of Instructional-Teaching Faculty Members male and female, full and part-time
- 11. Audited Expenditures and Revenues
- 12. Revenues by Source of Funds-local, state and federal, and student tuitions
- 13. Funds Available for Capital Outlay
- 14. Space Completed, Under Construction and Recommended
- 15. Degrees, Certificates and Diplomas Awarded
- 16. Participants in Community Education (non-credit)
 Courses

B. Illinois Board of Vocational Education and Rehabilitation Vocational and Tachnical Education

(State of ..., Research and Development Unit, 1974)

- tion-Programs Labor Demand and Supply, 1974, 1975, 1979:
 - a Current Employment
 - b. Projected Expansion and Replacement Needs
 - c. Vocational Education Output
 - d. Supply from Other Sectors
 - Estimated Percent of Households with Cash Income Below \$5000
- 3. General Assistance: Rate per 1000 Population-by County
- 4. General Unemployment by county
- 5. Aid to Dependent Children-by county
- 6. Youth Unemployment—by county
- Rate of School Dropout—by county

8. Secondary School Vocational Centers

C. Proposed Nebraska Technical Community Colleges Statewide Reporting Structure

- 1. Manpower Priority of Occupational Courses and Curricula
- 2. Highest Grade Level Completed by Adult Population
- 3. Adult population—with no more than 8th grade education
- 4. Adult population—with no more than 11th grade education
- 5. Adult female population (15 to 44)—with no more than 8th grade, 11th grade education
- Adult male population (20-49)—with no more than 8th grade, 11th grade education
- 7. Percent of Population Enrolled in School-by age
- 8. Characteristics of Student Enrollments
 - a. age, sex, civil rights category, handicapped, disadvantaged, veterans, social security dependents
- 9. Adult Education (basic and GED) Enrollment
- 10. Follow up of Award Recipients and Other Program
 Completers—by continuing education, seeking employment, employed and other
- 11. Follow-up of Students on Licensing Examination
- 12. Availability of Courses—by colleges with competencybased instruction and evaluation (Use of College Level Entrance Program examination, advanced placement, credit for prior work experience and courses challenged)
- 13. Student time to Degree, and Completion of Stated Student Objective
- 14. Retention and Progression reports
- 15. State Manpower Needs
- 16. New Programs and Program Deletions
- 17. Distribution of Course Offerings—by instructional delivery system e.g., computer aided instruction, programmed learning, self-paced instruction, open entry-exit, variable credit, work-learn, independent study and apprenticeship

- 18. Faculty Characteristics
- 19. Utilization of Physical Plan-by space type and acreage type
- 20. Student Financial Aid and Student Placement Service
 Information
- 21. Enrollments-by county of origin
- 22. Enrollments—by new high school graduates, delayed entrance, transfers
- 23. Graduates, Program completers and Exits

INSTITUTIONAL REPORTS ON ACTIVITIES AND PERFORMANCE

A. State University of New York at Plattsburg (1974)

- 1. Senior Survey
 - a. Growth Expectations by Student Major reported by students
 - b. Growth Expectations of Students by Major reported by faculty
 - c. Evaluation of Experiences
 - d. Comparison between growth expectations and achievement by student major

B. William Rainey Harper College (1973)

- Follow-up Study of Students Not Returning to Harper Fall 1972-Spring 1973
- 2. Follow-up Study of 1970 Alumni
- 73. Follow-up Study of Academically Successful Short
 Term Students Who Left Harper During 1972-73
 Year
- 4. Follow-up Study of 1972 Transfer Alumni

C. Southeast Community College, Milford, Nebraska (1974)

- 1. Job Openings, Completers and Placement 1973-1974
- 2. Employment of 1973-1974 Completers
 - a. by major field
 - b. average wage at graduation
 - c. average wage after 1 year
 - d, average wage after 5 years
 - e. In-state Job Openings and Placement

Steve Williamson, age 25, is currently a Higher Education Analyst at Systems Research, Inc., Los Angeles. He is former coordinator of the University of California Student Body Presidents Council (1971-73) and employee of California Department of Finance. He has written (with John Wall) "Scatalogical Thoughts."

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