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ABSTRACT

As a result of a study in 1972, in which independent college administrators were asked to assess their growth needs and problems, the Northwest Area Foundation established the Independent College Program to assist colleges in dealing with their needs. The first phase, the Admissions and Retention Program, was designed to assist colleges in coping with declining enrollments. Institutional planning for marketing and student retention is the general subject of six institutional case studies: (1) metamarketing at Pacific Lutheran University (Tacoma, Washington); (2) the student application pool at Carleton College (Northfield, Minnesota); (3) college choice, by the Minnesota Private College Research Foundation; (4) freshman and sophomore retention program at Drake University (Des Moines, Iowa); (5) attrition at St. John's University (Collegeville, Minnesota); and (6) advising and counseling to improve retention at Gustavus Adolphus College (St. Peter, Minnesota). (Editor/MSE)

Choice or Chance
Planning for Independent College Marketing and Retention

Report on the Admissions and Retention Phase of Northwest Area Foundation's Independent College Program 1973–1975

Northwest Area Foundation

Northwest Area Foundation was created in 1934 by Louis W. Hill, Sr., son of railroad and banking pioneer James J. Hill. Originally incorporated as the Lexington Foundation, the name was first changed to the Louis W. and Maud Hill Family Foundation in 1950 to acknowledge their gifts and the continuing interest of succeeding generations in promoting "the public welfare." Because the Foundation's commitment to the region from which its resources were derived has since encouraged its growth beyond the scope of the traditional "family" foundation, the Trustees and Directors again altered the name in 1975 to communicate more fully its evolving nature.

In keeping with this regional character, Northwest Area Foundation confines its grant-making activity to eight states — Minnesota, Iowa, North Dakota, South Dakota, Idaho, Montana, Washington, and Oregon. Since its inception, the Foundation has made 1,543 grants totalling $60,318,274 to serve the people of this locale through a broad spectrum of experimental and demonstration projects in the fields of the arts and humanities, education, the environmental and physical sciences, human services, medical sciences and health, and the social sciences.

Further information regarding Northwest Area Foundation's policies, priorities, and past activities may be obtained from its principal offices at West 975 First National Bank Building, St. Paul, Minnesota 55101 or its auxiliary location at 319 Yeon Building, 522 Southwest Fifth St., Portland, Oregon 97204. A brochure titled *Information for Grant Applicants* explains the Foundation's procedures and presents the outline by which formal grant proposals must be developed. The Annual Report offers descriptions of grants made in the most recent fiscal year together with the Foundation's current financial statements. Both are available on request.

Questions and comments regarding the Foundation's Independent College Program should be addressed to Paul M. Olson, Senior Program Associate.

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Studies in Retention

Preface

Education has been Northwest Area Foundation's major area of interest since its creation 42 years ago. Throughout that period, the Foundation's Directors have expressed a particular commitment to a strong dual system of private and public education, often by allocating funds to many of the 70 independent colleges located in the Foundation's region.

The traditional method of meeting these institutions' needs has been to respond to their requests for proposed growth. Early in this decade, however, the Directors became concerned about the viability of private higher education in a climate of rising costs, competition from more publicly supported educational alternatives, and the future inevitability of fewer students in the traditional college-age range. They decided that these critical and complicated circumstances argued for a new approach to assisting independent colleges.

As a result, they took the initiative in 1972. They asked college presidents and other institutional decision-makers to assess their conditions. As a group, the colleges reported two general areas of need — to increase income and to decrease expenses — and three potential solutions: having more tuition-paying students, more contributed income, and more cost-effective means of instruction.

Realizing that confrontation of these basic issues would necessitate major commitments of Foundation time and money, the Directors asked four educators of nationally recognized expertise to advise them on the program's development and to evaluate the proposals. Then in 1973 they established the Independent College Program, defining three phases that might stimulate proposals calculated to meet the needs described by college presidents.

The first — an Admissions and Retention Program to assist colleges in coping with declining enrollments — is the subject of this publication.

The second — the Productivity Program — was created to help the colleges adapt and adopt new approaches to teaching so that their standards of academic service could be sustained or advanced within projected financial resources.

The third — a Deferred Gifts Program — was designed to assist 20 colleges in raising contributions by using previously untried tax-encouraged approaches.

Fundamental to all the Independent College Program's phases is the effort to foster institutional stabilization, to facilitate systematic progress toward that goal rather than merely to add innovative programs. To be sure, colleges were encouraged to be inventive and resourceful in their proposals, and a certain degree of calculated risk was imperative for funding. However, the Foundation's primary concern was the degree of stabilization a grant could provide to a recipient college, and the degree to which increasing costs would be controlled without imperiling educational quality.

To date the Independent College Program has involved an investment of 4.6 million dollars and countless hours of work on the part of college and Foundation personnel and analysts engaged by the Foundation to examine overall program progress and early project results. Both quantitative and subjective evidence suggest that the total effort has been positive. In addition to [illegible]g acknowledged a continuing friend of private education, the Foundation has received commendation for its planning process, and in particular, for creating the program in response to needs identified by the college presidents. Positive outcomes have also been documented in the results of the funded projects. Six of them, in fact, comprise the substance of this document. Prepared by the projects' leaders and close associates, they describe the actual experiences of private colleges attempting to meet their educational objectives and to deal with inhibiting forces.

We believe that the Independent College Program has helped stimulate heightened sensitivity to the complex relationship between the quality of education and its cost. Economic questions have become even more insistent in the three years since the program was established; that, too, has deepened the colleges' continual concern for quality. Those in the Foundation's region are coping with the new demographic, social and economic realities with an unevenness of understanding and a variation in approach representative of educational institutions across the country. They *are* coping, however. Hopefully, new institutional plans for stabilization such as those underwritten in the Foundation's Program will help them fulfill their educational missions.

Together with the introductory comments on marketing and retention, we believe the six experiences described in this publication demonstrate that process. They are reported here in the hope that they might stimulate the thinking of college administrators, faculty members and trustees. One of the Foundation's purposes in creating the Independent College Program will have been accomplished if people concerned with improving independent post-secondary education benefit not only from having a Foundation-supported program but also from learning about other projects.

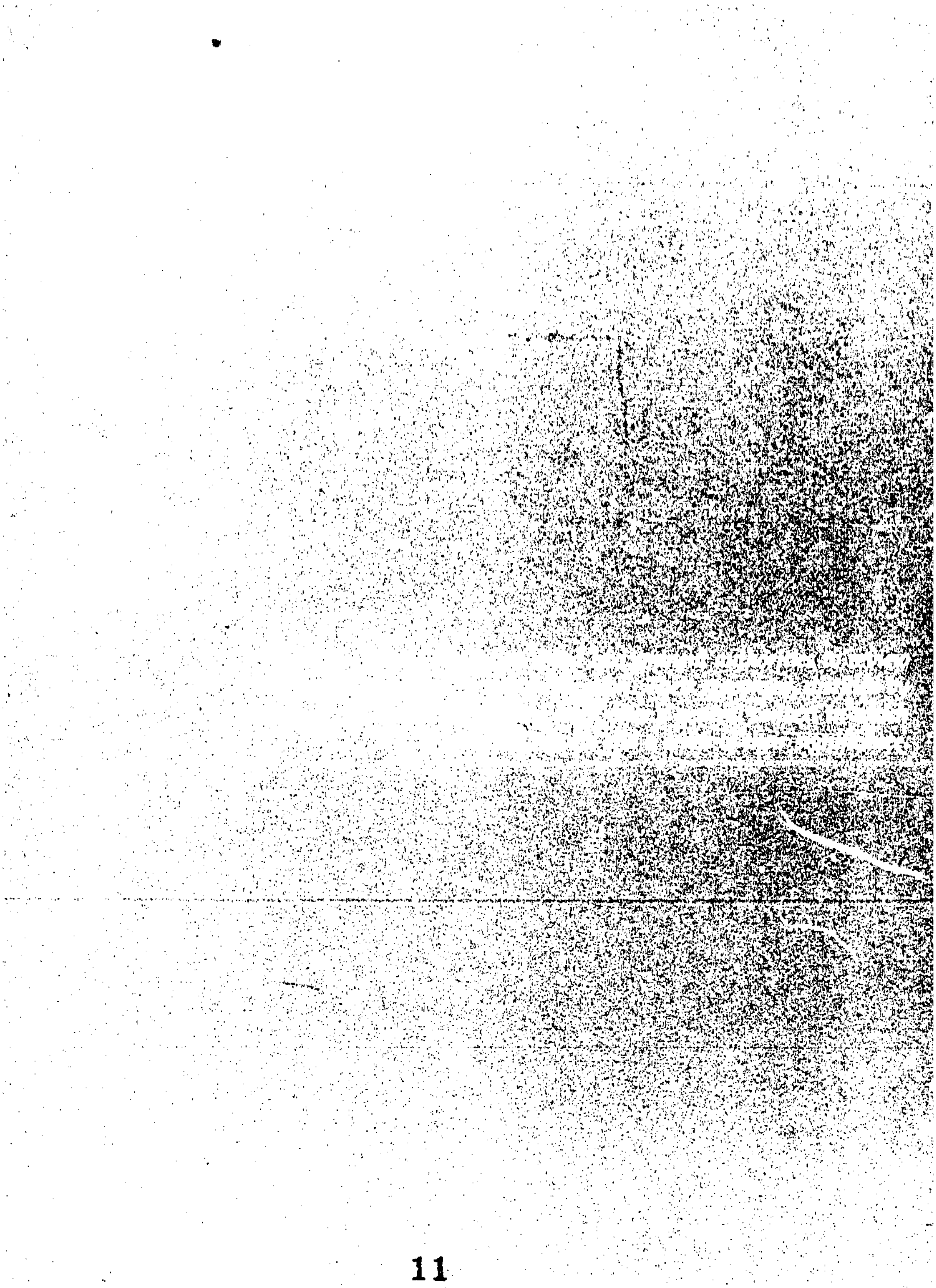
We are grateful to project leaders who will have made this learning possible by analyzing the six experiences documented here. We are also indebted to Ivan J. Fahs, Ph.D., of Research Coordinators, St. Paul, who offered editing assistance and conducted the interviews which serve as the basis for the introductory chapter. He spoke with two national leaders in the respective areas of marketing and admissions — Philip Kotler, Harold T. Martin Professor of Marketing at Northwestern University in Evanston, Illinois; and Fred. A. Hargadon, Dean of Admissions at Stanford University, Palo Alto, California. Their insights into the project papers and their offering of a general context in which to view them form the basis of the introductory chapter, which was written by Mary Lundblad, Mary Hayden and Mary Hill, all of Macalester College.

The members of the Independent College Program Advisory Committee have influenced this publication by identifying promising proposals. Dr. Edward A. Lindell, President of Gustavus Adolphus College, St. Peter, Minnesota; Dr. Manning A. Pattillo, Jr., President of Oglethorpe University, Atlanta, Georgia; Sister Joel Read, President of Alverno College, Milwaukee, Wisconsin; and Dr. Stephen J. Wright, Vice President of the College Entrance Examination Board, New York City have evidenced a superior degree of commitment in this process. To them we express our sincere gratitude. At this time we also extend a welcome to the educators who will from this time serve as an Advisory Committee for the Program's second stage. They include Dr. Paul Dressel, Assistant Provost and Director of Institutional Research, Michigan State University, East Lansing, Michigan; Dr. Charles J. Ping, President of Ohio University, Athens, Ohio; and Dr. Marion L. Shane, President, Mercyhurst College, Erie, Pennsylvania.

Finally, the Foundation is grateful to its Directors, whose authorization and encouragement created the Independent College Program in the first place.

Paul M. Olson
Senior Program Associate

July, 1976



When a college enrolls new students, it provides for its own regeneration. When it meets those students' educational needs, it accomplishes its purpose.

The complex processes involved in attracting and maintaining student enrollments thus are crucial to a college's well-being. It is for that reason that marketing and retention were considered worthy areas of endeavor for Northwest Area Foundation's Independent College Program. However, while they are legitimate concerns for most small independent colleges today and will likely become even more important if predicted demographic trends prove reliable, solutions to problems in these areas will not provide colleges with a panacea for financial ills. "Marketing and re ion are only two points in a constellation of factors, all interrelated, which affect an institution," says Fred Hargadon, Dean of Admissions at Stanford. "They may not even be the most important points in a given school, and may, in the ways they are resolved, tend to cover up other areas needing scrutiny."[1]

What is this constellation of factors?

The answer to this question, of course, varies from campus to campus, and virtually every reader could add to the list which follows.[2] However, it should provide a sense of the complex forces with which a college must deal today:

- zero enrollment growth within a decade
- concomitant zero growth in the demand for faculty, with the result being a higher tenure ratio and fewer promotions of younger teachers
- the failure of faculty salaries to keep pace with cost of living increases
- the introduction of collective bargaining in education
- a decreasing percentage of the Gross National Product being spent on higher education
- dwindling amounts of federal research and construction fund support
- increases in construction and maintenance costs
- technological change requiring colleges to buy expensive computers, microscopes, and other kinds of equipment necessary to prepare people for effective careers in growing industries
- the general proliferation of knowledge, necessitating acquisition of greater numbers of books, journals, and other resources
- programs — whose multiplication during the 1960's was virtually unbounded — draining the budgets of many institutions and serving many fewer students than they were designed to accommodate
- a growing need to provide more financial aid to students
- the value of a college education itself being questioned as other options for post-secondary training become available

Because each college must consider all factors which affect it when determining how to use existing resources better, any discussion of marketing and retention must be placed in the framework of institutional planning.

What is involved in institutional planning?

It is not the purpose of this introduction to deal with the complicated subject of institutional planning. The authors instead refer the reader to L. Richard Meeth's concise study of the subject, *Quality Education for Less Money*, where planning is discussed incisively and in detail. However, several of his points might sketch a framework in which to view the six discussions which comprise this publication.

Meeth identifies seven components in a college's structure: college philosophy, structural organization, facilities, faculty, curriculum, finances, and students. All must be taken into account in institutional planning. The plan itself, he says, "must be for continuous change — structured so that each year it can be reviewed by the faculty and administration and revised or restructured in light of new evidence."[3]

As critical as institutional planning is to a college's survival, "only a very small portion, perhaps 20 percent of America's private colleges, have effectively developed a plan based on sound data about themselves and their setting, which is revised at least annually and upon which the institution's leadership acts daily,"[4] notes Meeth.

Why isn't more being done? Among other reasons, he cites the fact that the path to management is still . . . "up through the ranks. Being a good teacher has been the primary criterion for being a good manager — a paradox that cheats students of good teaching and good management in their colleges."[5]

"Virtually no college administrator, until very recent years at least, has been taught or prepared professionally to undertake the planning task. We have not learned the skills or the strategies of planning. In short, people in colleges have not known how to get from here to there."[6]

Although cautious in predicting a general change in this pattern, Meeth is nevertheless more optimistic for the future in concluding, "Perhaps fear (of planning) is overcome when survival is clearly at stake."[7]

Few college administrators would disagree that survival *is* now clearly at stake for many small institutions, particularly survival that makes a significant contribution to higher education. If planning is in fact the key to survival, then perhaps more colleges will turn to it systematically.

Institutional planning involves resourcefulness all the time and expediency sometimes, in addition to a willingness to welcome challenges and endure unwanted pain. For some colleges, the process is exhilarating; for most, however, it is frightening.

Regardless of the difficulties which may ensue, institutional planning presents college administrators with the opportunity to choose among various alternatives for future action rather than having to cope with one crisis after another. It gives them all *possible* control over their situations — choice rather than chance.

Marketing

It is in the context of this kind of thoughtful decision-making for the totality of an organization that the particular area of marketing a college image should be viewed.

Many caution against using the word "marketing" with educators, who may feel that such "commercial" approach can't possibly describe the lofty process of attracting students to such cloistered settings.

However, as Leonard Berry of Virginia Commonwealth University has stated:

> . . . All organizations in society, whether business or nonbusiness in nature, offer some kind of product to some kind of consumer and, more or less, use marketing activities to further consumer acceptance. The product may be an idea, such as how to stop smoking; or a person, such as a political candidate; but it is nonetheless a product being offered to the market. . . . In short, no organization, whether it be business or nonbusiness, can avoid marketing. The choice is whether to do it well or poorly.[8]

As colleges plan for survival and evaluate their means of presenting themselves to the public, it would therefore behoove them to confront the reality of marketing. Pacific Lutheran University, Carleton College, and the Minnesota Private College Council did in the projects described in the chapters that follow this introduction. Their experiences substantiate views held by two educators who have successfully combined marketing and education for a number of years — Philip Kotler, Harold T. Martin Professor of Marketing at Northwestern University, Evanston, Illinois; and Fred Hargadon, Dean of Admissions at Stanford University, Palo Alto, California.

Hargadon feels that using marketing techniques in defining and reaching one's market is essential, although he admits that marketing a college differs from marketing a tangible product. "College is a one-time investment. A big commitment," he says. "It is not like turning from Ford to Chevy the next time you buy. It is here that product analogy breaks down.

"The value of this (the college) depends as much on the way it's used by the purchaser as the way it's packaged by the seller," he continues. "Therein lies the difference. It's a product that in its usage gains its value." He therefore believes it vital that colleges adequately inform students about their schools, reduce the expectations of students to attainable proportions, and truly assist students in making wise choices about college.

There appear to be three basic components in this marketing of higher education: *research*, *strategy* and *communication*.[9]

Research involves discovering what people think of a given school and then developing a profile of the type of person who would be likely to enroll.

Such an analysis of the potential student is necessary before a recruitment *strategy* can be developed, because that plan should answer the question: how can we contact the largest number of potential applicants in the most effective manner? If no research has been conducted, a school has only a vague notion of who its probable enrollees might be; this, of course, leaves success in recruiting to chance.

Deciding on the type of *communications* to be used in recruitment is thus dependent on a college's strategy, which is, in turn, based on research. Communications should include not only the admissions office personnel, but also students, faculty, and alumni, all publications, and in general, any segment of the college with which potential students might have contact.

What follows is not a manual for marketing one's college; it is simply a discussion of major ideas that should be considered as a college plans its research, strategy, and communications for recruiting future students, as they were set forth by Kotler and Hargadon in elaborating on the results of the Foundation-funded projects at Pacific Lutheran, Carleton, and The Minnesota Private College Council.

What is a college's image?

A college's image is pervasive. It can influence marketing efforts, fund-raising, press coverage — even the degree of faculty and staff satisfaction in being associated with the institution.

What is a college's image? Three different perspectives must be remembered when a college tries to define itself: a college is what it thinks it is; a college is what it wishes it were; and a college is what others think it is.

Self-knowledge is essential in planning. Unless one also knows what the public considers one's image to be, however, marketing methods may go far astray. At Pacific Lutheran University, market survey planners cautioned that faculty and administrators inside the institution were not reliable indicators of how the college is seen in the marketplace.

Kotler and Hargadon also repeatedly stress the need to (1) study what others think of one's college; (2) fit those perceptions to the standards the college has set; and then (3) gear all marketing materials (publications, personal contacts with prospective students, etc.) toward reinforcing that image. By so doing, one reaffirms in the minds of prospective students (and donors) that they are making the right choice.

One's image alone may stimulate inquiries about a school, and subsequently, materials and personal contacts may influence students to apply and enroll. Kotler points out that each reinforcement of image builds students' expectations. It is vital, therefore, to present an accurate image of one's school. "Don't promise what you can't deliver," he cautions.

The grant-supported studies which follow document the fact that a college's image blurs as geographic distance from it increases. Carleton College of Northfield, Minnesota, for instance, found this to be true on the East Coast, and Pacific Lutheran University verified this phenomenon when comparing perceptions of students at neighboring and more distant community colleges.

What happens if one doesn't like the image others hold? Hargadon points out that it can take up to 20 years for an institution to change its image. In so doing, a college may also lose those who were satisfied with what it had been. As a result, he advises that the best time to experiment with new markets is before one needs to.

What constitutes a college's market?

All schools possess three markets: the *primary market*, the *secondary market* and the *test market*.

The *primary market* includes those candidates who are likely to enroll if admitted. They are considered primary because candidates with similar profiles judged the school their first choice in the past. The *secondary market* represents those candidates who are likely to be accepted but who are more likely to attend another institution. The *test market* includes those candidates who have been encouraged to apply either by alumni or by the institution itself, but who represent a profile that had not considered the school as a primary or secondary choice in the past.[10]

A prerequisite to sound recruitment planning is the identification of one's primary market. Unfortunately, not enough colleges have recognized this need.

As one analyzes the current admissions scene, it is not an infrequent occurrence to find small colleges that have confused their primary and secondary and, for that matter, their test markets. In such a situation, the matriculant yields are difficult to predict and the viability of the institution is threatened whenever it does not have a strong primary market in its geographical area. Such a college also is likely to suffer from a high attrition rate. As a general rule, the primary market does not exceed a radius of 200 to 500 miles from the institution. It is easier to attempt to increase the numbers of students from the primary market than it is from a secondary market — simply because the rate of return in the primary market is considerably higher when related to the cost and effort involved.[11]

Even after a college has correctly identified its primary, secondary and test markets, Hargadon notes that college administrators must realize that there are natural and policy limitations on enrollments; that is, it is not possible to get *more* students than the market will yield, nor will any college get *all* of the students that the market will yield without the college's changing its standards.

What determines a college's yield?

A number of variables affects the yield rate, which refers to the number of students who actually enroll from among the number admitted. To determine the factors affecting a college's yield rate, a study of current students is helpful. Such a study can pinpoint *where* current students are coming from and *why* they chose the college.

Carleton College felt that a study of students who were admitted but chose *not* to come to their school was also helpful. They discovered that in many instances their school simply didn't fit the needs or desires of these students. Such a study can also isolate weaknesses in recruiting — some of which might not be in the admissions office. As Hargadon points out, success in recruiting can be measured by a less than perfect yield, since such a result indicates that applications are coming from students of high enough quality to command a number of choices.

Another factor affecting a college's yield rate may be the *attitudes* of current students. Kotler points out that every institution should audit current students to assure that they are really receiving the quality for which they are paying. Since current students come in contact with many prospective students, the college image they present can greatly affect total yield in recruiting.

Kotler also notes how "little" things can affect the recruiting process and thus, the yield. Many colleges appear so similar that an unlikely factor may be crucial in determining a student's final choice. Personal attention paid to the student through one more phone call; contacts by alumni or current students; a particularly effective viewbook; a letter from the President to accepted students — any of these and many more possibilities could determine the decision of a prospective student.

In recruiting students, there is a group other than potential students who also should be considered: the parents. Doing one's homework with parents may improve a college's yield as well. Hargadon's school chose, for example, to include parents in the decision-making process. A letter was sent to parents of prospective students which presupposed questions they might have and provided answers. Simply keeping parents abreast of happenings on campus can make them feel involved.

What about ethics and cost-effectiveness?

Some schools deliberately grab the interest of a large number of students to generate a comparable number of inquiries. Each inquiry must be processed, applications may result, and these colleges may be forced to reject many of the applicants, however.

There are thus two items to be considered in such a mass approach: ethics and cost-effectiveness. From the student's point of view, is the college doing a disservice to the many in whom it has generated interest, built hopes and then offered only disappointment? From the college's viewpoint, has the handling of so many inquiries and applications — which are eventually rejected — reached the point of diminishing returns? In considering both questions, a careful identification of the school's primary and secondary markets would have been profitable.

What do students expect of a college?

Usually, students expect too much.

Even if a college has been extremely careful in presenting an accurate picture of itself to prospective students, many freshmen arrive with expectations which no one college could fulfill, says Hargadon. He reminds us that choosing a college is a lot like choosing a marriage partner; what fills one's needs at 18 might not at 25.

Hargadon further believes that as colleges sell themselves to prospective students so also must they be candid in what they cannot do for students. He urges that catalogs and other materials include statements from upperclassmen regarding what they expected when they came, how well those expectations have been met and how their expectations changed during the time they were there. He counsels that a college should not be afraid to include some negative comments; such comments can increase a college's credibility.

It is also important to find out what students want from their expensive four-year experiment in college. A questionnaire sent to in-coming freshmen before their arrival might ask such questions as: what would you like to do here, how would you like to grow, and what would you like a faculty advisor to be? Knowing what students want from a college can help the school meet some of those expectations.

The Minnesota Private College Council's Survey of Seniors study pointed up the fact that what students say they are concerned about may not be what they really *are* concerned about. As Hargadon says, "The nexus at which these decisions are being made, both by the colleges to admit and the students to go to college, is unfortunately not a time at which all decisions are clear cut. There is a risk element . . . not only for the college, but also for the student. What one does is to try to minimize the risks."

Retention

Assume, in a flight of fancy, that a college has done everything right — chosen its market well, presented itself accurately, reduced to practical proportions the expectations of its students. The freshman class has arrived, and its size is sufficient to balance the budget for the fall term.

But how about the spring term and succeeding years?

Retention, or keeping a large enough number of students on campus through graduation to make it economically feasible to operate the college, has presented a very real problem for virtually every independent college.

Some colleges have come to grips with this problem and are maintaining the balance they need at present. Others have bemoaned their attrition rates, replaced their admissions directors, and buried their heads in the sand to avoid dealing with the real problem; that is, why are students leaving?

Admission is not retention. Simply getting students on the campus for their first semester does not assure their remaining through graduation. As Kotler points out, there are two separate, but inter-related, functions involved: *generating* the clients (admissions), and *satisfying* the clients (retention). He states that retention is not an admissions problem (although admissions actions may feed into retention) and that the number of students a college retains through graduation may affect its admissions efforts.

If retention is not the problem of the admissions department, whose problem is it?

Kotler and Hargadon agree that it is everyone's problem; it belongs to the entire college community. However, to say that a problem belongs to everyone is to say that it belongs to no one, unless a college works to forestall that possibility. A number of specific suggestions on how to do so are available both from projects underwritten in the Independent College Program and from Hargadon and Kotler.

No college is going to have a 100 percent retention rate, they warn. Too many human factors enter into students' staying or leaving college to permit all who come to stay. With that in mind, however, measures can be taken.

Work with the possible

The first task is to determine what a college's normal retention rate should be to maintain its operations. An examination of records from the Admissions, Registrar's, and Dean of Students' offices would give one this information and reveal at what points during the academic year attrition increases and decreases. With this factual base, plans can be formulated for maintenance or improvement of the retention rate.

As these plans are being made, there are several factual variables which will come into play, says Hargadon. These might include: whether a college admits exit-prone students; where its students live; and what their intentions are when they come to the institution.

An exit-prone student is one whose profile would indicate limited likelihood of persistence to graduation. If circumstances at a college dictate that exit-prone students will be admitted, how does it then meet the special challenges these students will offer?

Whether a college is primarily residential or commuter in nature makes a difference. Hargadon says studies show that primarily residential campuses have less attrition than schools with a higher percentage of commuters. This may account in part for the 88.5 percent retention rate reported in the Gustavus Adolphus study.

Did those students who left intend to stay through graduation when they came? If they planned to attend for only one or two years before going on to more specialized institutions, the college probably met their needs in those years. Surveys of students who leave can help point out their reasons for doing so.

Such variables can be ascertained easily as plans for retention are formulated. Another less easily measured and evaluated variable is perhaps more important: *why* do students leave?

The answers to this crucial question must come from the source — the students who have left or who are in the process of leaving. This can be done in several ways: surveys, exit interviews, or a combination of the two.

For those students who have already left, a survey would seem most practical for ascertaining the reasons behind their move. How extensive a sample population one needs, of course, is controlled by several factors, including how much money one can afford to spend on such a survey, and at what point the returns begin to diminish. Students who have been gone for several semesters may very well have formed opinions subsequent to leaving that would obliterate the actual reasons which determined their leaving. On the other hand, a survey of recently withdrawn students could point out problem areas more easily remedied.

The term "exit interview" can have as many definitions as there are colleges. In the past, the exit interview all too often consisted of an administrative check-list, comprised of questions like: Have you returned your dorm key, Are your exit papers signed, and Have you left a forwarding address to which we may send any unpaid bills? In a meaningful exit interview, however, the student will be encouraged to verbalize his or her specific reasons for leaving. Drake, St. John's, and Gustavus Adolphus all used exit interviews as a key retention strategy.

In most cases a withdrawing student will have experienced some conflict regarding his decision to leave prior to this interview. There will have been some factors that encouraged him to persist and some factors that encouraged him to withdraw from the college. An effective counselor can elicit these reasons. In some cases, the counselor's role will be to assure a student that his decision is a wise one. In instances when the student is leaving the college because of bad campus experiences, however, the counselor is in a position to take note of the reasons and seek remedial action. This action may not retain that specific student, but it might prevent other students' leaving for the same reason. It should, of course, be noted that the information gathered in exit interviews will be of little value if it is not reported to and used by institutional decision-makers.

During a meaningful exit interview, the counselor may discover that the two reasons often given by withdrawing students — personal and financial — really mean, "I am lonely," "I don't fit in," "I feel left out," "the college didn't keep its promise to me on financial aid," or "the quality of teaching hasn't met my expectations for a private college."

As these kinds of reasons for leaving become apparent, college personnel discover that efforts to combat attrition must be multi-pronged. Retention is integral to many college departments — financial aid, counseling, admissions, administration, faculty, public affairs, housing, and so on. As Hargadon and Kotler note, retention is everyone's problem; it belongs to the entire college community.

Note that student problems affect retention

As one campus newspaper recently pointed out, students are people too, and they have problems peculiar to them as a group. Some of the following, for example, could affect the student's remaining in school:

1. If a college admits only students from the top third of the high school class, a third of its freshmen must suddenly adjust to being in the bottom third of their college class. What effect will this have on those students? How can a college help them adjust?

2. What happens if a number of students come from the same high school class? Will they maintain the same patterns in college they had in high school? Can a college expect that some of them will transfer elsewhere simply to get away from the old gang?

3. Hargadon points out that many freshmen really start to think about college and the various kinds of colleges *after* they arrive on campus. This may confuse them. They may wonder whether they actually made the proper choice, and some may wish to take time off just to think about college itself.

(When prospective students tell Hargadon that they want to take a year off after high school to think through the college question, he encourages them to take time out *during* college rather than before, so that they at least know what questions they're trying to answer.)

4. Do students' personal backgrounds make college itself a risk? Hargadon points out that the riskiest group of students are those who are the first in their families to attend college, followed by those whose parents didn't go to college, but whose siblings did.

5. Do some students have academic troubles which will lead to attrition? Do some academically-troubled students remain at college, and if so, why? Do they find some degree of recognition or success other than academics? Can a college help academically-troubled students find enough success in some area to encourage their persistence to graduation?

6. The "classless college" has become a reality on many campuses, observes Hargadon. Nowadays it is normal for students to enter a school at many degrees of progress; advanced placement programs have helped to blur college class lines.

The time spent in college is often telescoped as well. Some students "stop-out" during their college years, requiring them to take more time to get a degree; other students pick up as many courses as possible during an academic year and attend summer sessions as well in order to complete their degree requirements in less time. Where, then, is the feeling of cohesiveness among a group of students who just happened to arrive on a campus at the same time? If a lack of "classmates" is contributing to a student's feeling of not belonging to a group at a college, does this too affect retention? If so, what remedial steps can a college take?

This desire to "belong" may well be a major reason some students chose a small private college.

7. Consider also that colleges may have set the stage for a student to find another institution or type of training which meets his or her needs. Most colleges today encourage students to go off-campus for (a) courses at other colleges within the geographic area; (b) interim terms at distant places; (c) semesters abroad; (d) internships; and other programs. All reinforce the feeling that there is no stigma attached to not being on one's original campus for eight consecutive semesters.

8. When a student needs assistance of any kind, does he or she find a responsive organization ready to help? A college should also ask itself whether everyone on its campus — the president, the dean, the faculty, the registrar, the cashier, the secretaries, the custodians — is willing to help a student in any reasonable way. Attitudes of college personnel affect retention. At times we need to be reminded that the college exists because of the students.

Re-sell the customer

A college attracts its students by selling them on the idea that it can meet their needs. The students bought the whole college, not just the football team, although that may have been the clincher. Therefore, when *re-selling* them on the college, the entire campus must be involved. Every segment of the college must be geared to fulfilling the reasonable expectations of the students.

The means of doing this will vary from campus to campus. Drake concentrated on the use of faculty advisors; St. John's used dorm residents for counseling; and Gustavus Adolphus developed its Collegiate Fellows program. Nevertheless, some plan must exist on all campuses.

Know students' expectations

In order to meet students' expectations, however, a college must know what they are. Simple surveys of students can remove the guesswork. Kotler and Hargadon both point to the value of the Carleton study as investigating not only the stock variables but attitudinal variables as well.

Acknowledge students' concerns about careers

Although the Minnesota Survey of Seniors indicates a minimal concern about careers on the part of the high school students surveyed, Hargadon says his experience would lead him to disagree. He and others in the field believe students today are concerned about where their liberal arts educations are going to carry them.

Hargadon suggests that open recognition of these concerns by the college — such as establishing a career planning and placement department, arranging for in-depth internships with various groups, having alumni counsel students on career choices and so forth — will let the students know that their futures are important to the college. It might also help cut the number of students who transfer to schools which the students feel are more career-oriented.

Do not try to prevent all drop-outs

The best way to serve some students who want to leave is to encourage them to do just that. Perhaps the student has wisely investigated other avenues and has discovered the best way to meet his needs. Why should a college argue with this?

There are students who may simply wish to take some time off from college — to think, to earn money to continue their education, or to cope with personal problems. For these students, the college can perform a valuable service in helping them plan the best use of their time away from campus. An independent study project could be designed, for example, or if finances are the problem, a college might help a student find a job in an area that would reinforce an interest demonstrated in college. While that student is away from campus, the college should maintain communications, sending him announcements of activities or special programs, the campus newspaper, and so on. A college should be helpful even to the customer it is about to lose. When that customer is ready to buy again, that helpfulness — or disinterest — will be remembered.

The college must have some vehicle to determine how it can be of assistance, however. Here again, a meaningful exit interview could be the tool. At Gustavus Adolphus it is virtually impossible for any student to leave the campus in the spring without the college asking what his plans are for the coming fall — re-enrollment, dropping out, transferring or whatever. Gustavus feels it is important to keep track of their students — and who can argue with an 88.5 percent retention rate?

Summary

The following six papers are reports from five colleges regarding the ways in which they spent their grants from the Northwest Area Foundation. They illustrate techniques employed in marketing their colleges and in retaining their students once they have arrived on campus. The five institutions report candidly on what worked and what didn't work. Virtually all techniques reported are transferable to other campuses.

The sixth paper reports the findings of a survey of Minnesota high school students regarding their perceptions of liberal arts colleges. Its purpose was to set the stage for a media campaign to promote the value of liberal arts education and private institutions.

We commend all of the six reports. In a time of increasingly stringent economic conditions for virtually all small, liberal arts colleges, all possibilities bear exploration. The studies of marketing and retention must be placed in their proper perspectives, however. They are only two aspects of the total problem facing most small liberal arts colleges today and in the future. The total problem is overall institutional planning.

If a college doesn't know what it wishes to become within the next three, five or ten years, that institution may become something else.

If a college doesn't know what it wishes to be, it can hardly convey an accurate image of itself to its market. It may therefore create further problems in admissions and retention.

If a college hasn't established goals, it runs the risk of becoming capricious, bending to whims just to attract students to balance the budget.

If a college lacks an over-all institutional plan, it removes itself from the possibility of making *choices* for the future and leaves itself to *chance*.

Footnotes

[1] Interview (by Ivan J. Fahs) with Fred A. Hargadon, Dean of Admissions, Stanford University, Palo Alto, California, January 12, 1976.

[2] Adapted from sources including Carnegie Foundation for the Advancement of Teaching, *More Than Survival: Prospects for Higher Education in a Period of Uncertainty* (San Francisco: Jossey-Bass, Inc., Publishers, 1975) pp. 1–2; and L. Richard Meeth, *Quality Education for Less Money* (San Francisco: Jossey-Bass, Inc., Publishers, 1974), p. 159.

[3] L. Richard Meeth, *Quality Education for Less Money* (San Francisco: Jossey-Bass, Inc., Publishers, 1974), p. 143.

[4] *Ibid.*, p. 2.

[5] *Ibid.*, p. 161.

[6] *Ibid.*, p. 4.

[7] *Ibid.*, p. 5.

[8] Leonard Berry, "Marketing Continuing Education Programs," *Business Education Forum*, XXVII (April, 1973), p. 8.

[9] William Ihlanfeldt, "A Management Approach to the Buyer's Market," *Liberal Education*, LXI (May, 1975), pp. 140–142.

[10] *Ibid.*, pp. 137–138.

[11] *Ibid.*, p. 140.

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Pacific Lutheran University of Tacoma, Washington, condu
study in which the outside community compared PLU wit
institutions. The study revealed that the outside community
of the institution varied greatly from the way in which
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Pacific Lutheran University
Tacoma, Washington

1
Chapter

Assessing Potential New Student Markets: Meta-Marketing Applications

Douglas B. Leister, Ph.D.
Robert K. Menzel, M.S.T.
Jane A. Shanaman

The market research conducted by Pacific Lutheran University demonstrates the viability of action research as a mode for university decision-making. The two-year project, funded by two annual grants from Northwest Area Foundation of St. Paul, Minnesota, effectively wedded the expertise of theoretical research to the needs of practitioners in higher education. A major component of the enterprise was the application of marketing thought and research technique referred to as "applied metamarketing." The study has provided Pacific Lutheran University with a mass of information about its "product position" relative to seven other four-year colleges and universities, six community colleges, and two vocational-technological post-secondary institutions within the "market area" with whom it competes for the limited educational dollars of prospective "customers," or "purchasers."

Additionally, the market research has provided numerous clues to the kinds of programmatic innovations which may attract these newly identified markets.

The authors challenge the factually correct but pragmatically inadequate assumption that colleges fulfill primarily social service functions. The reader is instead encouraged to view higher education as a "declining industry" in a highly competitive marketplace where it competes with other vendors of "educational products." Viewing it thus, educational planners should place increasing emphasis on the needs and wants of *potential markets* and less on *products* developed on the basis of what certain administrators or faculty *think* will sell or be worthwhile in the marketplace.

By 1973 Pacific Lutheran University, with some 2,500 full-time students, had reached a nearly stable enrollment. The frightening decline in enrollment which in the early 1970's threatened several neighboring competitors, both public and private, did not occur at PLU. Its major marketing constituency of Lutheran families* continued to supply adequate numbers of qualified freshmen in response to lively traditional recruiting methods. At the same time, recruitment of increasing numbers of transfer students, facilitated by the appointment of a transfer coordinator, successfully compensated for slightly declining numbers of entering freshmen.

Anticipating a delayed reaction effect, however, the Administration of PLU faced the indisputable evidence that the potential recruitment pool of traditional 18–22 year olds was shrinking on two fronts; total numbers of available freshmen will start to decline by 1980; and no longer propelled by the draft into college, increasing numbers of 18-year olds will defer making an "educational purchase" in the higher education marketplace ("while I get my head together").

Sparked by the then-Vice President for Development, and encouraged by an invitation from Northwest Area Foundation's Admissions and Retention Program, the Administration looked in two new directions — toward potential new markets among adults, singles, senior citizens, and military retirees on the one hand, and toward the numerous vacant desks in upper division classes and the unoccupied buildings on weekends and in the evenings on the other.

A proposal for undertaking a feasibility study of potential new markets was submitted to the Foundation. The general goals of the proposal were: to increase physical plant and institutional efficiency and utilization; and to investigate the possibilities of broadening the base of student appeal through such innovative programs as a weekend college.

* Over one-half, 53.5%, of its student body identify themselves as "Lutheran."

When the three members of the project staff* began work, a document was developed setting forth the rationale for the study titled "Applied Metamarketing and Pacific Lutheran University." The objectives of the initial feasibility study were articulated in greater detail as follows:

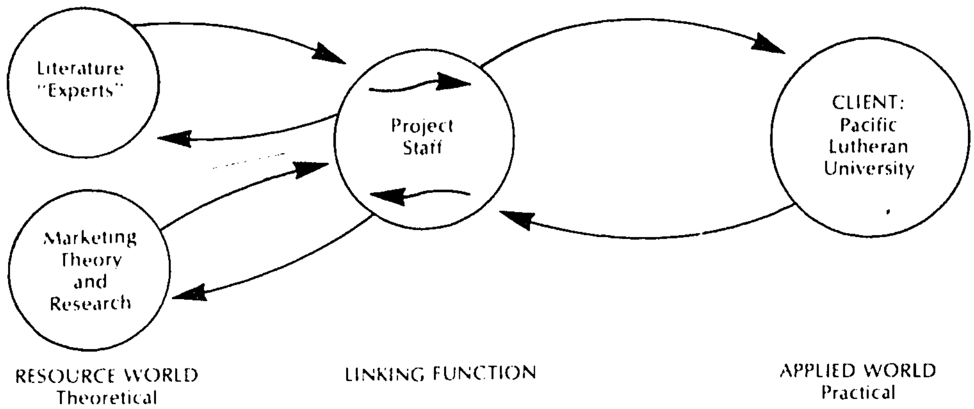
> The central goal of this feasibility study is to continue to increase total revenues of the University with only marginal increases in costs. This may be achieved if new programs can be developed which increase both faculty and physical plant utilization during the 12-month calendar year. Programs will be investigated that may lead to significant increases in utilization on a profitable basis. In so doing, peak and off-peak periods will be carefully explored with respect to demands in the marketplace. In marketing literature, this is referred to as synchro-marketing. It should also be noted that increased utilization may be achieved through greater use of off-peak periods and continuing to "overload" the current peaks. In either case, *the marketplace is the guideline — not the empty buildings.* (Italics added.)
>
> The major limitations upon proposals to broaden program offerings will be the cost-revenue relationships with respect to the University's total program. Other evaluative criteria will be the consistency of the program with PLU's goals and desired market identification and the extent to which the program would dilute current normal revenues (i.e., a full-time student paying regular full tuition). (1)

* Robert K. Menzel, Director of the Center for Human Organization at PLU, Douglas V. Leister, then Assistant Professor of Marketing in the School of Business at PLU, and Jane A. Shanaman, Research Associate.

Action research methodology

The two-year project employed an action research methodology, with the Project Director and the Researc' Associate serving as "linkers" between theoreticians and researchers of marketing and practitioners of higher education. Figure 1 following demonstrates the model which was used.

Figure 1
*An action research model**



*Adapted from Ronald G. Havelock, *The Change Agent's Guide to Innovation in Education.* Englewood Cliffs, N.J., 1973. Pg. 18.

According to theorists, action (or cooperative) research is the collaboration of researcher and practitioner in the diagnosis, evaluation and solution of problems and needs in the practice setting. (2) As described by the initial writer on the subject, Stephen Corey, action research means research done by practitioners for themselves to solve problems in their home setting. (3)

In the case of this project, the "practitioners" in higher education were the administrators and faculty at PLU, while the theoretician/researchers, particularly for the market research aspects of the project, were Douglas V. Leister, Assistant Professor of Marketing at PLU, assisted by student assistant Robert A. Clarke, Jr., and Douglas L. MacLachlan, Associate Professor of Marketing in the Graduate School of Business Administration at the University of Washington. In an action research project, the linker role, (carried out by Robert Menzel and Jane Shanaman) is not only helpful in creating a healthy, functioning liaison between theorist and "client" at all stages of the project; it becomes essential when research conclusions must be translated into inferences and implications for program planning, and during the implementation stage of the project.

This is an effort to present the findings of a sophisticated marketing procedure which 1) reveals the nature of Pacific Lutheran University as perceived by two significant markets; and 2) reports the preferences of these populations for the institutions in the marketplace. Titled *The Market Research/Innovative Program Study*, it encompasses two consecutive project years funded by separate grants from the Northwest Area Foundation. The first year (1973–1974) focused on potential new adult markets, while the second year (1974–1975) concentrated on potential community college transfer students.

The two-year study also makes specific marketing recommendations to the Administration. The methods utilized in the latter phases of follow-up research and program design will be described briefly. However, the major emphasis of this chapter will be on the market research methodology, which is virtually unique in its application to higher education.

The two-year project may be viewed as a pair of pairs. Each year's phase contained a market research component and a marketing plan component.

Phase I 1973–1974: Researching potential new markets

A. The market research component: The market research consultants, aware of the limitations of traditional marketing research methodologies based on demographic studies, adopted an approach labelled attitude or image research, employing the relatively recent techniques of multidimensional scaling (MDS) and multidimensional unfolding (MDU). Both require sophisticated computer technology. The process will be partially described in the following sections of this chapter. More detailed descriptions are noted in the references to this work.

This component of the research yielded a number of specific conclusions regarding the market position of PLU in relation to eleven other competing post-secondary institutions, and provided useful data regarding the perceptions and preferences of target populations for PLU as well as the other institutions included in the study. This data also yielded clues regarding the potential response of certain heretofore underdeveloped markets, e.g., suburban and city upper-middle-class adult women.

B. The program-innovation and planning component: After the perception-preference data were analyzed, the staff carried on further more traditional research to develop a number of options for innovative programs consistent with the current "product position" of PLU. This is now professionally referred to as "institutional positioning." (4) Literature search, correspondence and personal contact with resources in higher education (both at PLU and elsewhere) yielded a list of program suggestions which were further explored. Market samplings of potential "purchasers" were taken by mailed questionnaire and by the marketing research technique of focused group interviews. Additionally, research data gathered by other branches of the University were analyzed and integrated into the findings.*

Results of the market research and follow-up studies were: 1) a differentiated marketing plan, projected as a three-year demonstration market test, developed to increase the number of female adult students, and titled Adult College Entry (ACE) Program; 2) a proposal developed and submitted to the federal government for funding a program of Cooperative Education; 3) a recommendation for further study of an Early College option with guidelines; 4) a Derivation Conference for representatives of the College of Arts and Sciences, out of which emerged a proposal for interdisciplinary studies in the Liberal Arts subsequently funded by the National Endowment for the Humanities; and 5) recommendations for further market research among community college transfer markets and for some immediate actions to improve the image of community college faculty and students among PLU faculty.

Phase II 1974–1975: Researching potential new markets

A. The market research component of the second phase, also funded by the Northwest Area Foundation, utilized the same methodology and procedures to define the institutional positions of PLU and seven of its major four-year competitors for the educational dollar in western Washington, and to discover the perceptions and preferences of potential transfer students from six area community

*A comprehensive survey from the Student Life Office and an institutional goals survey by a consulting firm provided data regarding attitudes of current students, parents and other PLU constituencies.

colleges. The research data indicated that community college transfers to four-year institutions are more interested in academic quality, variety of course offerings, tuition costs, and personal attention from faculty; less interested in friendliness on campus, nearness to the individual, and size; and least interested in social life and religious life on campus.

B. The program innovation and planning component: The research consultant and the Project Director prepared recommendations for development of a new marketing plan for the potential community college transfer market. Included in these recommendations were such components as: consistent promotion around an appropriate theme, a faculty-to-faculty exchange program, a two-year tuition cost plan, and establishment of one or more 800 WATS telephone lines to receive incoming calls from prospective transfer students.

Market research framework

Research for the purpose of new program development in higher education has traditionally relied on the concepts and needs of the supplier or upon demographic analysis and description of the proposed clientele. For example, faculty committees and department heads frequently define curricular changes based on professional standards or individual interests rather than on changing student desires or educational needs of new clienteles. Indicators of reactions to this "production-oriented" approach are the cry for "relevancy" in the 60's and the student demand for "career-related" education in the 70's. Current literature is replete with documentation of these effects on higher education, and few institutions have remained unchanged by the impact of their changing "markets."

Most admissions officers continue to devote the major portion of their time to the long familiar practice of visiting high schools, an age-focused approach to recruiting at a time when community colleges have proliferated, high school graduates delay college entrance, and national trends reflect growing diversity in student populations and educational options. This rapid change in both clientele and competition in the marketplace of higher education calls for an analysis of new markets that extends beyond demographic descriptions of new student populations and/or competitiors. To know the age or sex of potential new student clienteles reveals little about their needs, abilities, and goals. In fact, such traditional demographic information can be very misleading to educational planners.

The analysis of new student populations for higher educational institutions is aided by the application of "metamarketing," a recent development in marketing theory. Describing the concept, Leister has written:

> An early expansion of these (marketing) concepts has been the viewing of virtually any "exchange process" which requires management as a marketing problem in which the thing exchanged can be considered a "product." (7) This conceptual view is referred to as "metamarketing" and has its roots in accumulated theory in the marketing of business products. For example, metamarketing would consider institutionalized religion (i.e., formal, public, sanctioned services) as a "product" with marketing implications. (5)

Leister points out that, along with profit-making businesses, colleges experience such marketing problems as distribution, product design, pricing and promotion. Accordingly, the principles of marketing can be applied to the exchange process in which students purchase courses and credits, which can be considered "products."

Applied metamarketing in the industry of higher education calls for market analysis and market research approaches that go beyond quantitative or demographic means. **Understanding the way in which potential clienteles perceive the institutions competing for purchasers' dollars can yield more usable information for program development than traditional demographic analysis of the marketplace.**

The *perceptions* that potential customers have of post-secondary institutions are more reliable indicators of educational choices than are such demographic characteristics as age, sex, and socio-economic status. For example, a prospective adult student's perception of the academic quality of a private liberal arts college (in contrast to a community college) will be more significant in her choice of a classroom in which to take a literature course than will her age, sex or income.

The aggregate body of characteristics attached psychologically by consumers to objects in the marketplace, such as products, brands, and companies, has long been called "image" by profit-making businesses. One writer has referred to the concept of image as "the total set of attitudes, halo of psychological meaning, the association of feelings, the indelibly written messages over and above bare physical qualities. . . ." (10) Similarly, educational institutions can be regarded as stimuli possessing an aggregate body of characteristics to which consumers respond. Educational institutions possess such images. (6)

In order to understand the images of institutions in the marketplace as perceived by individuals, an aggregate measure that summarizes individual attitudes is needed. A number of alternatives exist for measuring the perceptions and evaluations of individuals of most products or objects; these methods are generally referred to as attitude measurements.

Products, companies and institutions possess images, not in a vacuum, but in relation to the images of similar objects. Within a subset of generic type these images are perceived by consumers in relation to each other. For example, cornflakes are perceived by consumers in relation to branflakes, sugar pops or other cereals and are evaluated in relation to these competitors according to such criteria as nutritional value, price, taste, etc. Similarly, the images of post-secondary institutions are related to one another and ranked on the basis of several criteria in the minds of consumers. This concept of the interrelatedness of product images is called *product positioning* in marketing theory. Understanding the position of a product or institution in relation to its competitors provides important clues for product design, pricing policies, and general marketability. In the context of postsecondary educational institutions, this conceptual framework is referred to as *institutional positioning*. (4,5,6)

Once a product position or image placement relative to competitors is known, three options are open to management. They may 1) strengthen the position by introducing only that information or new products that are consistent with the current position; 2) attempt to place the product in a new position; or 3) attempt to introduce new criteria for product evaluation and thereby effect a repositioning of product (4). The latter two alternatives require major marketing efforts and expenditure of significant amounts of time and money.

In order to collect data that reveal placement of a product relative to other products, the perceptions of individuals are measured. The concept of *perception* is based on the postulation that individuals can perceive objects along a continuum and related to one another, but without judgment as to their relative desirability. The evaluation of these stimuli occurs when the individual perceives the objects in relation to himself or others. A *preference* for one object over another is asserted when the individual ranks several stimuli (in this case, educational institutions) with respect to an attribute or criterion which he or she considers important.

Perceptual measurement results in displaying the placement of products relative to each other in the minds of consumers. The added dimension of preference interprets product positions and the desirability of any one product's locus in the minds of consumers. Defining the criteria used to make preference choices contributes to marketing decisions to strengthen a product position or to reposition a product.

The twin techniques of nonmetric multidimensional scaling (MDS) and multidimensional unfolding (MDU) were employed by this study to measure perceptions and preferences respectively. MDS, pioneered by Shepard (11) requires only rank-ordered information from respondents, but allows for the construction of metric psychological distances between and among the stimuli. It further facilitates the measurement of complex image constructs in which all of the significant attributes or variables may not be known.

The preselection of criteria for image comparison by respondents is not required by MDS. These factors were particularly important to this study in view of the fact that institutional images of postsecondary educational institutions have not been the subject of previous research or management discussion in higher education.

Respondents were asked to rank each of the pairs of institutions on the basis of very similar (1) to very dissimilar (9), as in Figure 2. Then average dissimilarity

Figure 2

Paired comparisons of institutions of higher learning in Washington

		Very Similar								Very Dissimilar	Column
Highline CC	— F. Steilacoom CC	1	2	3	4	5	6	7	8	9	09
Tacoma CC	— Highline CC	1	2	3	4	5	6	7	8	9	10
Pac Lutheran Univ	— Knapp Business C.	1	2	3	4	5	6	7	8	9	11
Central Wash S. C.	— Univ Washington	1	2	3	4	5	6	7	8	9	12
Evergreen S. C.	— Clover Park Voc-Tec	1	2	3	4	5	6	7	8	9	13
St. Martin's	— Pac Lutheran Unv	1	2	3	4	5	6	7	8	9	14
Univ Puget Sound	— Seattle University	1	2	3	4	5	6	7	8	9	15
Central Wash S. C.	— St. Martin's	1	2	3	4	5	6	7	8	9	16
Knapp Business C.	— Univ Puget Sound	1	2	3	4	5	6	7	8	9	17
Pac Lutheran Univ	— Univ Washington	1	2	3	4	5	6	7	8	9	18

Hereafter followed all possible pairings for the twelve institutions.

On the same questionnaire importance data was gathered with the following scale:

Please rank each of the following factors in terms of its relative importance in *your judging the similarity or dissimilarity* of the pairs of schools in Section 1 above.

School's Characteristic	*Not Important*								*Very Important*	*Column*
Size	1	2	3	4	5	6	7	8	9	75
Nearness to you	1	2	3	4	5	6	7	8	9	76
Academic Quality	1	2	3	4	5	6	7	8	9	77
Tuition Cost	1	2	3	4	5	6	7	8	9	78
Personal Safety Near Campus	1	2	3	4	5	6	7	8	9	79
Variety of Course Offerings	1	2	3	4	5	6	7	8	9	80

ratings of pairs (called "dissimilarity ratings" because higher numerical values are attached to objects that are more dissimilar) can be ranked from the most similar to the least similar pair. These rankings fed into the TORSCA-8 computer routine resulted in a graphic display of the relative positioning of the included educational institutions. The graphic display represents as closely as possible the ranked pairing of institutions.

Table One below presents the 12 carefully selected postsecondary educational institutions included in this positioning study.

Table 1

Postsecondary institutions in Washington in positioning study

University of Washington (UW), largest graduate State university in Washington
Evergreen State College (ESC), four-year State college
Central Washington State College (CWSC), four-year State college
Tacoma Community College (TCC), nearby community college
Ft. Steilacoom Community College (FSCC), nearby community college
Highline Community College (HCC), community college
Pacific Lutheran University (PLU), private four-year institution
University of Puget Sound (UPS), private four-year institution
St. Martin's College (SM), private four-year institution
Seattle University (SU), private four-year institution
Clover Park Vocational-Technical School (CPV-T), extensive adult vocational technical program and evening enrichment program
Knapp Business College (KBC), downtown secretarial business school

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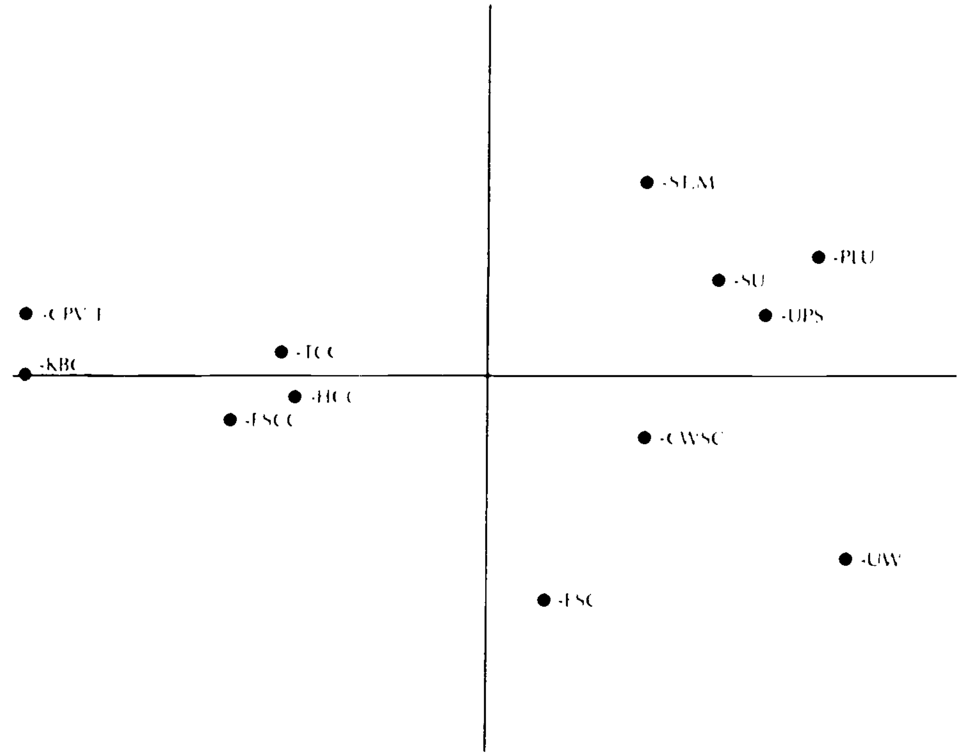
Figure 3 below presents the two-dimensional solution for the dissimilarities data as processed by the TORSCA-8 computer routine. Although the configuration can be displayed in one, two or three dimensions, two dimensions can be graphed best.

Figure 3

MDS two-dimensional perceptual map

Institutions of higher learning, western Washington state



INTEGRATED INTERNAL SAMPLE
SELECTED FACULTY AND STUDENTS AT PACIFIC LUTHERAN UNIVERSITY (N 97)

Although horizontal and vertical orthogonal axes are commonly drawn arbitrarily through the configuration of points by the computer routines, it is the relative positioning of the points (institutions) that is important. The axes may be rotated without changing the relative positioning of the points. MDS displays the conceptual field and relationships of stimuli, in this case post-secondary institutions, for general understanding of the clustering of, and distances between, institutions. For example, on the perceptual map reflecting the viewpoints of the students and faculty at PLU (See Figure 3) Evergreen State College (ESC) is shown to be classed by itself; the community colleges are grouped with little distinction between them; the vocational schools cluster at one extreme; PLU is associated with two other private universities of similar size; and the University of Washington is in a class by itself.

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On the other hand, MDS does not provide data to explain the displayed positioning of institutional images, and does not set forth either criteria used for comparison of the respective institutions, or clues as to the desirability of any one institution's position. In order to develop such interpretive data, a second questionnaire was administered with the first, and the technique of multidimensional unfolding (MDU) was employed to develop the attribute/preference data necessary to interpret the relative institutional positions and to identify strengths and weaknesses in the PLU institutional position. (12) The same respondents were asked to rate each of the schools as very desirable (1) to very undesirable (9) on the basis of criteria selected as the result of a pilot test (See Figure 4).

Figure 4

*Criteria significant in similarities ratings**

Nearness to You	*Very Desirable*								*Very Undesirable*	*Column*
Univ. of Washington	1	2	3	4	5	6	7	8	9	07
Pacific Lutheran U.	1	2	3	4	5	6	7	8	9	08
F. Steilacoom C. C.	1	2	3	4	5	6	7	8	9	09
Tacoma C. C.	1	2	3	4	5	6	7	8	9	10
Knapp Business C.	1	2	3	4	5	6	7	8	9	11
Central Wash. S. C.	1	2	3	4	5	6	7	8	9	12
Seattle University	1	2	3	4	5	6	7	8	9	13
Univ. Puget Sound	1	2	3	4	5	6	7	8	9	14
St. Martin's	1	2	3	4	5	6	7	8	9	15
Clover Park Voc.-Tec.	1	2	3	4	5	6	7	8	9	16
Evergreen S. C.	1	2	3	4	5	6	7	8	9	17
Highline C. C.	1	2	3	4	5	6	7	8	9	18

*Additional attributes listed were : size, quality, low cost, safety, and variety of offerings

An analysis of these preferences resulted in a set of average attribute ratings for each school on each of the following criteria: location, size, academic quality, low cost, safety and variety of offerings. Respondents were also asked to rate these preselected criteria as not important (1) to important (9) in their judgments regarding the similarity/dissimilarity of the 12 post-secondary institutions. Table 2 below presents these average ratings for each of the educational institutions for each of the aggregated sets of sub-samples.

Table 2

Average attribute ratings[a]

	Integrated Internal Sample (N 97)						Integrated External Sample (N=134)					
	Nearness	Size	Quality	Low Cost	Safety	Offerings	Nearness	Size	Quality	Low Cost	Safety	Offerings
UW	4.63	6.51	3.09	3.42	5.88	1.72	3.73	5.43	2.27	3.92	4.73	1.46
PLU	2.29	2.10	2.37	6.24	3.06	3.56	3.37	2.97	2.70	5.87	2.96	2.73
FSCC	4.24	4.43	5.96	2.38	4.30	5.59	4.38	4.02	5.06	2.88	4.04	4.93
TCC	4.06	4.37	5.32	2.41	4.57	5.25	3.72	3.71	4.70	2.74	3.91	4.73
KBC	5.18	4.75	5.91	4.29	4.91	6.37	4.44	4.69	5.39	4.53	4.68	6.24
CWSC	6.34	4.99	4.88	3.35	3.93	3.82	6.58	4.33	4.33	3.81	3.62	3.98
SU	5.11	3.35	3.20	6.04	5.39	3.77	4.53	3.55	3.52	6.06	4.77	3.63
UPS	3.54	2.58	3.19	6.52	3.72	3.54	3.11	2.82	2.80	6.21	3.08	2.77
SM	4.58	3.66	4.56	5.97	3.60	4.62	5.17	3.94	4.49	5.46	3.63	4.57
CPVT	4.41	4.48	5.88	3.51	4.55	5.86	4.37	4.27	4.97	3.27	4.19	5.08
FSC	5.17	4.21	5.63	3.60	4.19	5.26	5.51	4.29	4.85	4.03	4.18	4.46
HCC	5.59	4.52	5.70	2.39	4.44	5.25	4.80	4.24	4.83	2.83	4.06	4.66
Impor.[b]	2.93	5.91	7.61	4.07	2.86	6.89	3.12	4.68	7.84	4.40	3.17	7.70
Corr.[c]	.551	.694	.934	.726	.450	.918	.392	.490	.948	.600	.239	.976

[a]Scale: 1 — "very desirable" to 9 — "very undesirable."
[b]Average importance ratings for the attributes: 1 — "not important" to 9 — "very important."
[c]Spearman correlation of average attribute rankings with PREFMAP vector solution.

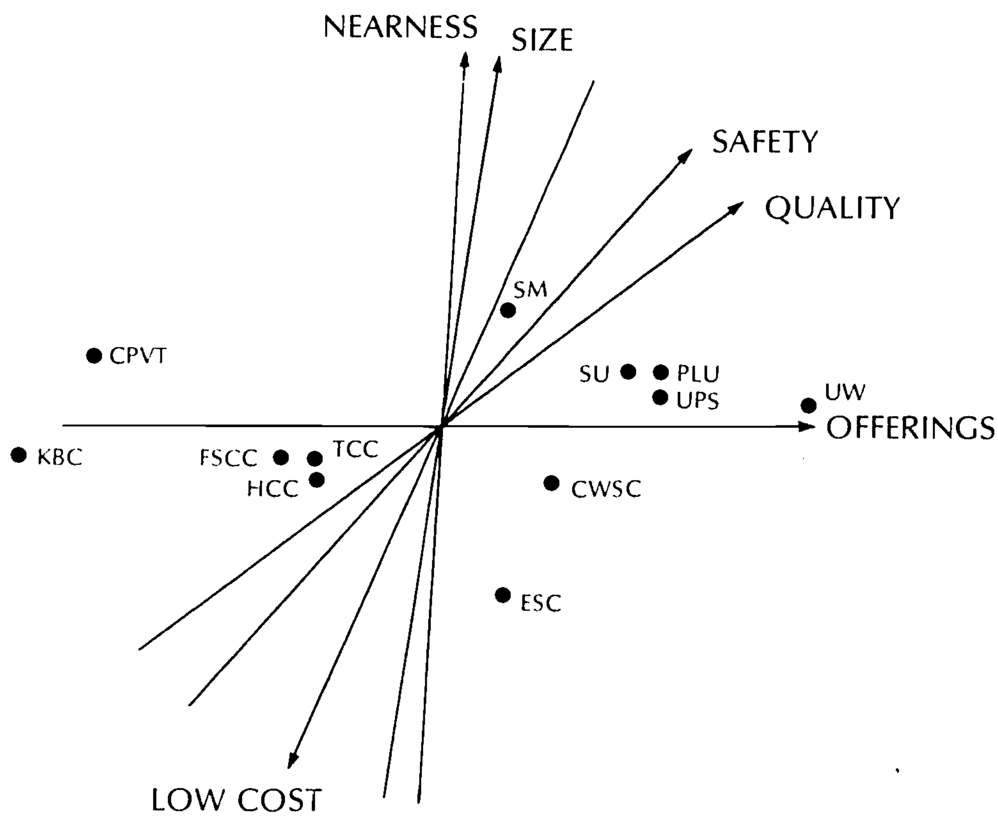
These average attribute ratings provide particularly usable information for decision-making. In the first place, they indicate which qualities are regarded as *most important* to respondents in a given market segment in viewing post-secondary institutions in their region. In Table Two, the sampled community groups regard academic quality and variety of offerings as much more important (7.84 and 7.70 on nine-point scales) than location or campus safety (3.12 and 3.17). These attributes are also seen as far more important even than cost (4.40); perceptions also correspond with the facts, as the relatively slight differences in tuition costs at PLU and UPS are reflected in the 6.21 rating for UPS against a 5.87 for PLU.

The decision-making value of these data is readily apparent. For example, although the cost of tuition at PLU and UPS is relatively higher than the other institutions, decision-makers may make some decisions based on the lesser importance of cost and the much higher importance of academic quality and variety of offerings in the view of the target market segments.

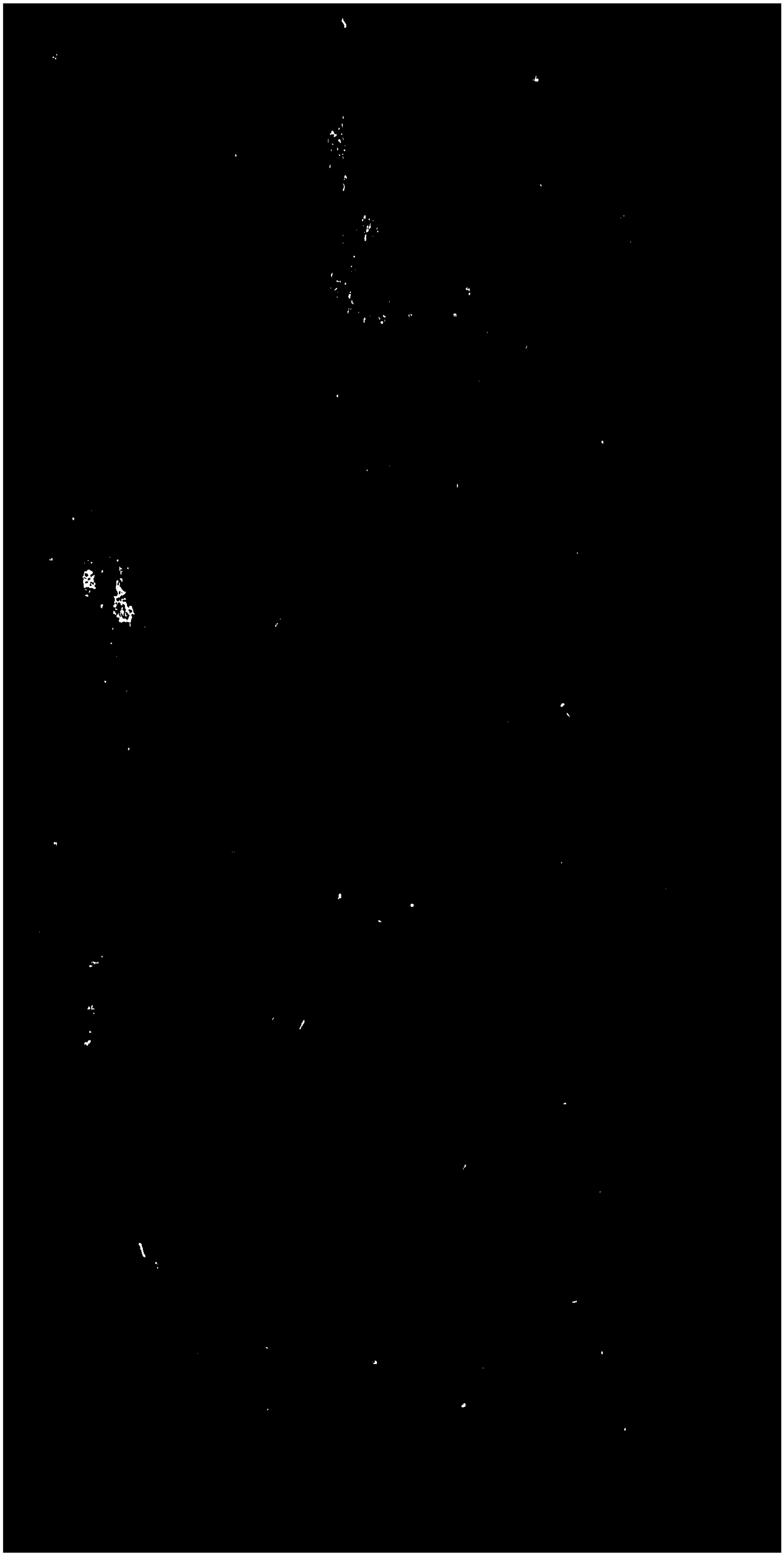
Further information to guide institutional decision-making was derived from the average attribute data by portraying it visually as it is done in Figure 5, "Perceptual-evaluative space map of institutional market: integrated external samples." Vectors representing the selected attributes are positioned within the perceptual spaces of the various institutions as seen in Figure 3, although here the integrated external sample data is used. Perpendicular lines drawn from an institutional point to a vector line rank the schools along that vector. To interpret the vector positions the reader may consider, by way of example, the "variety of offerings" line, with the arrow point indicating the most desirable direction. Extending perpendicular lines from each institution point to the vector, UW is seen by all samples as being most desirable in terms of variety of offerings, followed in order by UPS and PLU (virtually tied), SU, CWSC, SM, ESC, HCC, TCC, FSCC, CPVT, and KBC. This ranking also corresponds well with the ordering of the average rankings shown in Table 1, because of the high correlation between input ranks and vector positions provided in the Spearman correlations in the lower line of the table (in this instance, a high .976). While MDS contributes to a general understanding of institutional position *vis-a-vis* perceived close or distant competition, it is from MDU and the average attribute ratings that specific guidelines for program development can be inferred. Further insight into the decision process was provided by data from the respondents, who were also asked to indicate *how important* each institutional attribute was to them in judging the institutions.

Figure 5

Perceptual-evaluative space map of institutional market Integrated external samples (N = 139) community groups



(Note the *clustering pattern* in this map as compared with the integrated internal samples in Figure 3.)



professional program leading to a job at the end of two years, and one from students in a social science course leading to an AA (Associate in Arts) degree at the end of two years. All community college samples were taken during regularly scheduled class time with a community college instructor in attendance.

An internal sample of currently enrolled PLU student transfers from community colleges (N = 38) was also taken, bringing the total sample to 292. Individual institutional sample size is represented in the listing above. Three of these community colleges (TCC, FSCC and GRCC) regularly channel students to PLU.

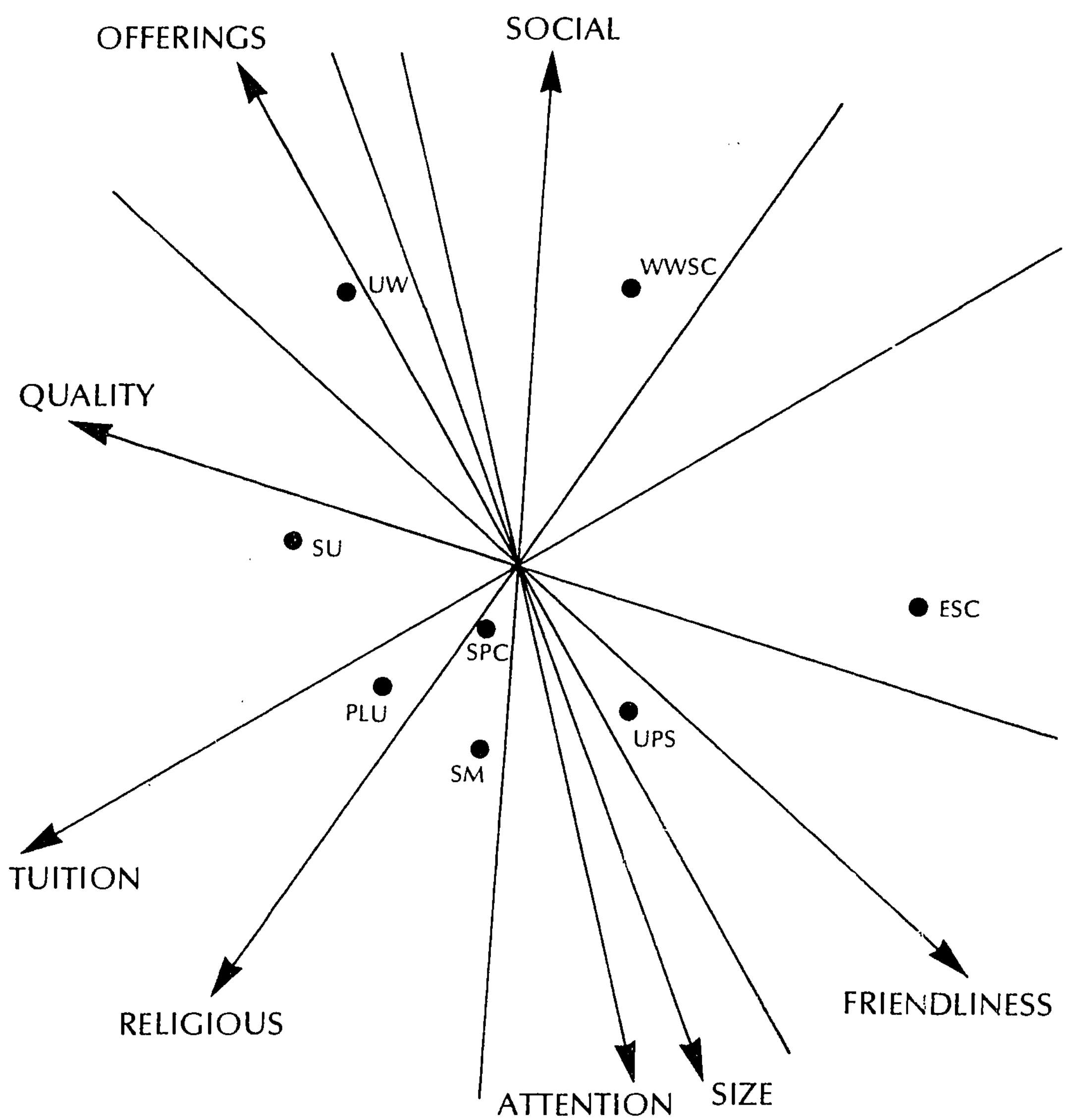
The community college sample groups were asked to respond to two questionnaires administered anonymously by the survey director and an associate. The first requested judgments of similarity and dissimilarity between related pairs of eight regional four-year institutions of higher education to which community college students might transfer for a Baccalaureate degree. The format was the same as for the previous applications. Respondents were also asked to rank the same criteria utilized in the first research application with the addition of "social life on campus," "friendliness," "religious life on campus," and "personal attention from faculty," as not important (1) to very important (9) in making dissimilarities judgments.

In seeking preference data, the second instrument asked respondents to rate each of the schools as very high (1) to very low (9) on the basis of academic quality, variety of course offerings, tuition cost, and personal attention from faculty, and as very desirable (1) to very undesirable (9) in terms of friendliness on campus, size, religious life on campus, and social life on campus. Respondents were also asked to rate each of the above characteristics as not important (1) to very important (9) in deciding about a four-year institution to which to transfer. The format was the same as that in the first application.

In both tests each subsample was processed separately through MDS and MDU computer programs. In addition, internal and external samples from the first administration of the questionnaire were pooled and processed through MDS and MDU. The two subsamples from each community college (professional students and social science students) were similarly run as separate and integrated samples from each school. The resulting mass of data included eight separate perceptual maps and attribute charts in the first research effort in the community and 19 separate perceptual maps and attribute charts resulting from the community college study. The reader may refer back to Figure 5 to view the results of the MDS and MDU processing of the integrated external sample in the first application (community groups). Figure 6 is the comparable integrated external sample perceptual space map for the second application (community college students).

Figure 6

Perceptual-evaluative space map
Integrated external samples (N = 292) community college students



The only significant differences between the two research applications were the demographic characteristics of the target populations; the restriction of the post-secondary stimuli to four-year institutions for the community college application; and the addition of several criteria to the list of those used in judging dissimilarities in the community college study. The results were highly comparable and illuminating.

Some findings and their implications

The findings reported in the preceding were selected to illustrate the role which attitude/image data can play in decision-making. They represent, but do not fully include, all findings or implications drawn from this research effort. Massive amounts of data relevant to all the institutions included in both applications were accumulated; however, our reporting here must simply focus on those aspects considered most significant or relevant to the intended audience. The interested reader should see references 4, 5, and 6 for detailed methodological discussions.

Comparisons between internal and external samples provide management with important data for decision-making. In marketing a product, the least significant and yet frequently most influential perceptions of an organization are those held by members of the organization, e.g., the sales manager or college dean. It is helpful to understand these influential intraorganizational perceptions and to identify variances with those found in the marketplace. The data from internal samples extracted during each study demonstrate the normative behavior expected from faculty and student identification with the parent institution.

In the present study an integrated internal sample of PLU business students (N = 64) and science and social science professors (N = 33) was drawn from the first application (new markets), and a sample of students at Pacific Lutheran University who transferred from a community college (N = 38) was taken in the second study. In terms of perceived academic quality, PLU was ranked "most desirable" by the first internal sample, and "highest in quality" by the second.* On the other hand, every other external sample (except students at nearby FSCC) invariably rated UW highest on the quality attribute.

Furthermore, the first sample of faculty and business students rated PLU most desirable in size and second to UW in desirability of course offerings. The community college students transferred to PLU rated PLU highest among all institutions in personal attention from faculty and most desirable in terms of friendliness on campus, size, religious life on campus and social life on campus. (See Table 3, "Attribute Ratings.")

The positive implication of this perceptual bias among faculty and students at PLU is that the school in fact measures up to their expectations; they feel that they are "getting their money's worth." On the other hand, it may also be that students and faculty are engaging in the common behavioral activity of post purchase rationalization. Marketing thought tells us that it is common for consumers to overemphasize the perceived advantages of a major purchase after making it in order to reinforce their decisions. It is most likely that a combination of both factors applies to this situation, with the positive result of student satisfaction at PLU.

These strongly positive internal attitudes pose perceptual and decision-making pitfalls for management. The internal viewpoint is not a reliable indicator of the dynamics in the marketplace.

We now turn our attention to what the selected market groups say about academic quality at PLU.**

All samples demonstrated that perceived academic quality is the most important factor in determining perceptions and preferences among post-secondary institutions. Community respondents designated academic quality as the most important factor in similarity/dissimilarity judgments, while community college

*The second test application with community college students requested rating of schools in terms of high (1) to low (9) on academic quality, while the first application requested ratings in terms of most desirable (1) to least desirable (9).

**The massive amounts of data have equal applicability to all of the other eleven post-secondary institutions included in the first survey, and the other seven in the second.

students named academic quality as the prime factor in the choice of a transfer school. Perceptions held by community adults of PLU place it high on the academic quality attribute, ranked second only to UW. In fact, the market segment of the League of Women Voters ranked PLU ahead of UW in terms of academic quality. This finding indicated that continued research into the educational needs of this population could result in profitable program development for PLU, at the same time giving evidence of community satisfaction with current program offerings.

PLU did not fare as well with some community college student populations. Although samples from TCC and FSCC, adjacent to PLU, rated it second and first respectively in terms of academic quality, the larger, older, and less proximate institutions of HCC and BCC respectively rated PLU fourth and sixth among eight on the academic quality attribute. The implication is that PLU has perceptual problems with those community colleges that are more distant and more concerned with the quality of their academic tracks.

Once management sees the positioning of PLU relative to other four-year institutions in terms of academic quality, they would want to be careful to reinforce the positive placement of the institution among community adults by introducing and publicizing those programs that are consistent with perceived high quality. At the same time, program options inconsistent with perceived high quality (e.g., remedial learning centers, contracted studies, competency-based curricula) would have to be developed and promoted with great care, played down, or eschewed altogether. For example, although the State's new experimental college, Evergreen State College, appeals successfully to students who seek innovative approaches, all samples in the PLU marketing studies showed great distrust of the academic quality of ESC. Similarly, if program developers at PLU are interested in obtaining significantly larger numbers of transfer students from HCC and BCC, where the greatest attention to academic quality appears to be given, they must engage in a marketing program that repositions PLU on the quality attribute dimension. This is a more difficult and costly strategy than reinforcing present product positioning.

To engage in either process one must define the elements that contribute to the much-used but ambiguous term "academic quality." Some of the measures commonly suggested have been degrees and credentials of professors, GPA requirements for admission, student/faculty ratios, and the number of graduates accepted in graduate schools. Any one individual's perception may be based on highly variable factors, such as knowledge of a single exceptional department or of attitudes toward peers who attended that institution. While this study did not attempt to discover the relative significance of the many factors contributing to perceived academic quality, it did reveal several correlates that can act as guides to new program development.

For example, a high variety of course offerings was found to correlate positively with perceived desirability and high academic quality, as Table 3 demonstrates. The TCC student sample reveals that schools are ranked in similar

Table 3
Ranked ordering of colleges on attributes of academic quality, variety of offerings and attention

(Two community colleges: one favorable to PLU, two less favorable, and the Integrated External Sample of 1st Application.)

TCC			HCC			BCC		
Qual	*Var*	*Attn*	*Qual*	*Var*	*Attn*	*Qual*	*Var*	*Attn*
UPS	UW	*PLU*	UW	UW	SM	UW	UW	SM
PLU	UPS	ESC	WWSC	WWSC	*PLU*	WWSC SU	WWSC	*PLU*
UW	*PLU*	SM	SU	UPS	SU	SPC	UPS SU	ESC
SU	WWSC	UPS	*PLU*	SU	UPS	UPS	ESC	SU
SM	SU	SU	UPS	*PLU*	SPC	*PLU*	SPC	SPC
WWSC	SPC	SAC	SPC	SPC	ESC	ESC	*PLU*	UPS
SPC	ESC	WWSC	SM	SM	WWSC	SM	SM	WWSC
ESC	SM	UW	ESC	ESC	UW			UW

INTEGRATED EXTERNAL

Quality	*Variety*	*Attention*
UW	UW	Not included in 1st Appl
PLU	*PLU*	
UPS	UPS	
SU	SU	
CWSC	CWSC	
SM	ESC	
TCC	SM	
HCC	HCC	
ESC	TCC	
CPVT	ESCC	
ESCC	CPVT	
KBC	KBC	

but not identical positions on the attributes of academic quality and variety of courses; the HCC sample reveals identical ranking for five out of eight stimuli on these attributes; and the integrated external community resident sample ranked nine out of 12 institutions in identical positions with respect to desirable academic quality and desirable variety of course offerings. With the exception of ESC, those schools not identically ranked on the two attributes differed by only one ranked position.

Another factor found to be associated with academic quality (but not as definitive in its relationship) was tuition cost. Associations between high cost* and high or desirable academic quality were demonstrated by similarly grouped institutions at the upper and lower ends of the scale. See Table Four, "Cost/quality comparisons for selected populations." We cannot, therefore, say that high cost is perceived to mean high academic quality for any one institution, but we can recognize that price and quality are related in a general way. This general relationship reflects the perception that the less expensive academic products are also of lesser value. The management of PLU may interpret this to mean that, while public lectures by professors on timely subjects might be considered an excellent public relations effort, any large scale, low-cost non-credit program would conflict with the quality image of PLU now held in some markets.

*The first application referred to "desirable undesirable" cost. All schools with higher tuitions were ranked as less desirable, so we interpret high cost to be undesirable for purposes of comparison with results from the second application.

Table 4

Cost/quality comparisons for selected populations

TCC		HCC		Integrated External First Application	
Quality Hi	*Cost Hi*	*Quality Hi*	*Cost Hi*	*Quality Hi*	*Cost Hi*
UPS	UPS	UW	UW	UW	UPS
PLU	PLU	WWSC	PLU	PLU	SU
UW	SM	SU	SM	UPS	PLU
SU	SPC	PLU	WWSC	SU	SM
SM	UW	UPS	SU	CWSC	KBC
WWSC	WWSC	SPC	UPS	SM	ESC
SPC	SU	SM	SPC	TCC	UW
ESC	ESC	ESC	ESC	HCC	CWSC
				ESC	CPVT
				CPVT	FSCC
				FSCC	HCC
				KBC	TCC

A dimension interpreted to associate negatively with academic quality was educational innovativeness. The experimental curricula of Evergreen State College, established by the Washington State Legislature in 1970 to offer alternative educational forms (including contracted studies, student-defined curricula, and high community involvement in course content) were recognized by the distinct isolate positioning of that institution on all perceptual maps. The reader will note that ESC ranked last or in the last quartile among all displayed samples on the academic quality attribute. ESC's low ranking on variety of course offerings among the two community college samples correlates with its low ranking on academic quality. This example further illustrates the perceptual compatibility of perceived academic quality and perceived variety of course offerings. The negative perceptual bias toward ESC's academic quality thus also results in a negative perceptual bias toward variety of course offerings, although in fact the potential variety inherent in the unstructured ESC curriculum may be much higher than that of the structured curricula of the more traditional institutions.

PLU's management may interpret the identified discrimination against educational innovation to mean that novel programs such as a college without walls or a major effort to develop contracted studies for working persons would conflict with PLU's efforts to reinforce its positive positioning on the attribute of high academic quality. PLU's proposed changes in the past year have been conservative, such as a program to integrate increased numbers of adults into regularly scheduled courses, and experimenting with interdisciplinary studies in the liberal arts area.

It was in relation to the community college market that PLU was found to have some significant perceptual problems. The first application of MDS distinctly revealed condescending attitudes toward community colleges on the part of PLU students and faculty. The perceptual map and attribute figures reveal the distinct position of all community colleges at a great distance from other institutions of higher education. (See Figure 3.) At the same time, community college student populations that are at a greater traveling distance from PLU (namely, HCC and BCC) ranked PLU among the lower half of the schools on the more important attributes of academic quality and variety of offerings.

Both internal and external perceptual biases act as deterrents to increasing transfer applications to PLU from community colleges. Replacing these perceptual biases with positive attitudes that are mutually reinforcing will require major faculty and administrative efforts and expense. PLU's management must reassess its commitment to increasing the transfer population at PLU in light of this new data. The commitment and leadership of key influentials throughout the University as well as those in positions of authority must be applied to this problem if it is to be resolved. Not the least of these decisions is that of a master plan which includes projecting the desirable proportion of traditional vs. "new" students which PLU wants, and the desirable balance of enrollment in upper and lower division courses.

The attribute rankings provide at least one clue for a differentiated marketing strategy among the more distant potential transfer students. Current students at GRCC, BCC, and HCC, the more distant institutions, all perceive PLU as highest or second highest in giving attention to its students among all eight four-year schools. Among some of its most promising market populations, PLU is already seen as "the college that cares" — a factor that can be exploited in promotional and recruiting efforts, thus taking advantage of favorable "product positioning."

The results from the community college study revealed other significant data in conflict with some current PLU self-perceptions and policies. Whether "religious life on campus" is perceived positively or negatively by respondents, it was consistently demonstrated to be a relatively unimportant attribute for community college students in making perceptual distinctions among institutions. They ranked "religious life" as least important among the eight preselected attributes tested for relative significance in their selection of a four-year institution to which to transfer.

The diverse impact on community college markets of perceived religious life on campus and the relative unimportance of this attribute in selection of a four-year institution suggests the need for differentiated marketing strategies for the PLU product. Although it may work very successfully to stress the presence of a Christian environment when recruiting high school graduates through parish referrals, the same perceptual factors are not dominant nor significant with the Associate in Arts student from an urban community college. A successful recruiting program will recognize and respond to these distinctions through differentiated marketing.

Marketing strategy in "a time of retrenchment"

The application of MDS and MDU can develop increased awareness of an institution's close competition and understanding of specific criteria used to establish any one institution's perceptual position in the marketplace. The careful integration of MDS and MDU data can point to perceived institutional strengths and weaknesses. These factors can set parameters for program development and aid the analysis of the question, "Will it sell?"

MDS and MDU are first steps in the task of program development. They are techniques to be used to gain a basic understanding of some segments of the marketplace and of some of the dynamic factors operative therein. After the application of MDS and MDU, the educational needs of favorable market segments must be researched. Institutional constraints and energy must be identified. Educational options require exploration. Program planning, implementation and dissemination necessitate administrative understanding of research data and support of recommendations. Thus, the track from research data to program inauguration to student acceptance is many-faceted and requires integration of different kinds of data.

In this "time of retrenchment"* marketing strategies, based on *consumer needs* and on an understanding of the marketplace, along with product availability (i.e., faculty interest and expertise) and internal constraints, are, in the view of the authors, valuable components for effective institutional planning. It is the market, as well as the producer, which must influence university decision-making in the industry of higher education.

*The apt phrase is in the title of The Group for Human Development in Education, *Faculty Development in a Time of Retrenchment*. New Rochelle, N.Y.: Educational Change, Inc., 1974.

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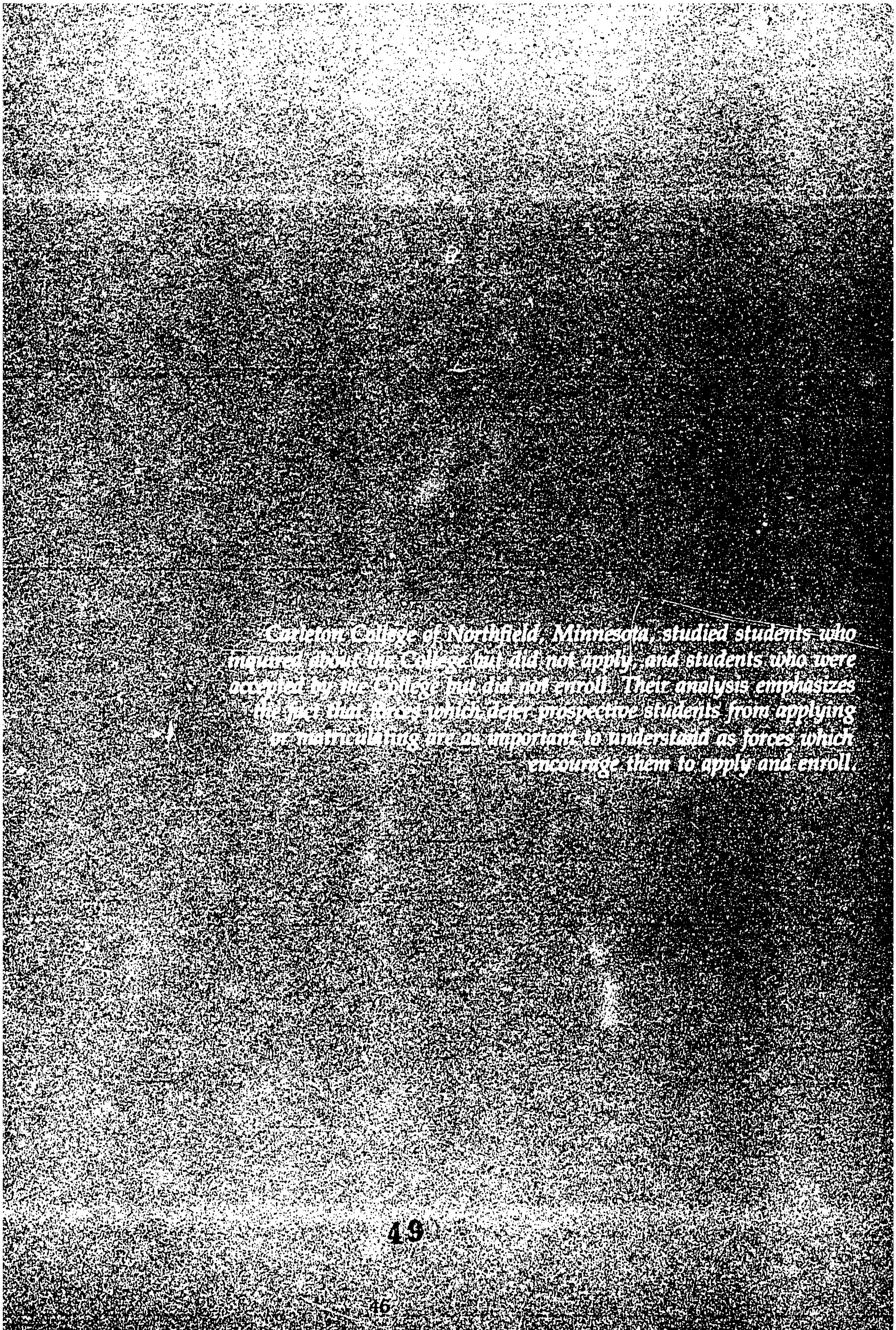

Carleton College of Northfield, Minnesota, studied students who inquired about the College but did not apply, and students who were accepted by the College but did not enroll. Their analysis emphasizes the fact that forces which deter prospective students from applying or matriculating are as important to understand as forces which encourage them to apply and enroll.

Carleton Colleg
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The Carleton Application Pool An Empirical Stud

Daniel F. Sullivan, Ph.D

Carleton College is located on a 90-acre campus in Northfield, Minnesota, 40 miles south of Minneapolis and St. Paul. The college has historically attracted a nationally diverse student body of high quality and a distinguished faculty. It is described in a popular guide as "one of the nation's most widely known and respected liberal arts colleges . . ."[1]

As is well known, small private liberal arts colleges have been hit hard in the last few years by the combined effects of inflation and declining enrollments. Carleton has not experienced declining enrollments: instead, total enrollment at Carleton has increased since 1969, and its physical plant is now operating at a full capacity of 1650 students. Some, in fact, have questioned whether Carleton has already exceeded its optimum size.

Carleton's selectivity has been threatened, however. Applications declined 10 percent from 1971 to 1973.[2] Thus, in order to meet its enrollment goals, Carleton has recently had to accept approximately 65–75 percent of its applicants. Though several of Carleton's competitors in the Midwest now accept well over 80 percent, the college's national competition has been able to be much more selective.[3]

These trends led Carleton administrators and admissions personnel to decide to undertake research on the characteristics of the Carleton applicant pool, with specific attention to those prospective students who inquire about the College but do not apply for admission and those who are accepted for admission but do not enroll. A grant from the Northwest Area Foundation provided the needed funds. The research, conducted in 1973–74, sought answers to two questions:

1. Given the fact that the College's admissions office receives approximately 7,000 inquiries each year from prospective students why is it that less than 20 percent actually submit an application? and
2. What affects an accepted applicant's decision to attend or not to attend?

[1] James Cass and Max Birnbaum, *Comparative Guide to American Colleges*, (Sixth edition; New York: Harper and Row Publishers, 1973), pp. 103–104. Cass and Birnbaum report that Carleton accepts 63% of its applicants, of which 50% actually enroll. Sixteen percent of the freshmen have a verbal SAT score above 700 and 20% of the freshmen have a mathematical SAT score above 700. The median freshmen scores at Carleton are: 630 verbal, 650 mathematical.

[2] The number of applications over the past seven years at Carleton has ranged from a high of 1639 in 1971 to a low of 1479 in 1973. In 1974 there was an increase of 5% in the number of applications received, and for 1975 an increase of 3%, hopefully — but not certainly — the beginning of a reversal in the downward trend.

[3] The percentage of accepted applicants at such schools as Amherst (38%), Oberlin (40%), Swarthmore (42%), and Pomona (50%) is lower. Data are for the incoming classes at these schools in the fall of 1971. Source: Douglas D. Dillenbeck and Sue Wetzel, eds., *The College Handbook, Parts I and II*, The College Entrance Examination Board, 1972.

Non-applicant study

Each year Carleton's Admissions Office has nearly 7,000 separately identifiable contacts with prospective students. Although each of these prospects has sufficient contact with the admissions process to warrant a file, over 80 percent of them never submit an application. It was decided that a sample of these people should be surveyed to find out what they were like, where they chose to go to college, what they know and don't know about Carleton, how they know it, and why they didn't apply.

In May 1974 questionnaires were sent to 1,875 persons with whom the Admissions Office had had contact during 1973–74 but who did not submit an application. This number is approximately 30 percent of the more than 5,500 admissions contacts which did not result in an application. The persons selected for inclusion in the study were chosen with the use of a random sampling procedure to insure their being representative.

Usable responses were received from 800 or 43 percent of those who received questionnaires, but the analyses presented in this paper will be based on the much smaller number of 559.[4] Without an extensive non-respondent follow-up survey, we could not determine the degree to which the group of usable returned questionnaires is representative of the sample. A 43 percent return is a lower percentage than is desirable for surveys of this type. However, since region of residence and sex are known for the whole sample of 1,875, the respondent group can be compared with the sample in those respects. When it *is* compared, it turns out that the region and sex distributions for respondents and for the whole sample are virtually identical. Thus, if there is a response bias in the data, it is probably that persons more interested in Carleton were more likely to respond. If such a bias exists, it is a useful one, since it is these more interested students whom Carleton probably has the greatest chance of influencing to apply in future years.

Since the non-applicants' SAT scores and high school class ranks statistically mirror those of the accepted students, it is likely that most of them would have been accepted had they applied. The question, then, was why hadn't they? We thought perhaps they didn't apply because they were less well off financially than the acceptances. As Table 1 shows, however, many of the parents of non-applicants were relatively well-off financially, although later analysis will show that Carleton's cost bothers them much more than it bothers those who applied and were accepted.

Table 1

Parents' annual income: non-applicants

Income	*Percent*	
Less than $10,000	9%	
$10,000 — $14,999	14%	
$15,000 — $19,999	20%	
$20,000 — $24,999	13%	
$25,000 — $34,999	19%	
$35,000 — $49,999	12%	
$50,000 or more	13%	
Median = $20,000–$24,999	100%	(482)

[4] Of the total of 800 respondents, 64 people said that they had not applied to college, and so they were excluded from the analysis. An additional 124 were looking for a college or university with a major or a program not offered at Carleton, and so they were also excluded from the analysis. This group has made a wise choice and cannot really be regarded as part of Carleton's potential applicant pool. Twenty-six persons were either inquiring about transfer possibilities, and hence were not potential freshmen, or were SAM (Single Application Method, whereby all Associated Colleges of the Midwest may be applied to in one application and for one fee) applicants whose applications would have come to Carleton had they been rejected at their higher choices, making them technically applicants to Carleton. These 26 were also excluded from the group analyzed. These exclusions leave 586 total cases for analysis, but at the time that the report on which this paper is based was written, only 559 of this number were coded, keypunched, and stored on Carleton's computer. Thus, the paper deals with 559 responses.

If they did not choose Carleton, where did these non-applicants attend college? By and large, they went to the same schools as those students Carleton accepted but who chose to go elsewhere. As Table 2 illustrates, *Carleton's non-applicants do not reject the small liberal arts college as a type, but choose to attend other liberal arts colleges.*

Table 2

Acceptance and non-acceptance percents attending other institutions

College Type	*Accepted: Went Elsewhere*	*Non-Applicants*	*Combined*
Public Universities	16%	23%	20%
Private Universities	21%	19%	20%
Little Three, Seven Sisters, and Ivy League	26%	15%	19%
ACM Schools*	10%	13%	12%
Select Small Colleges#	16%	7%	10%
Other Private Colleges	4%	10%	8%
Some Top Competitors+	5%	8%	7%
Minnesota Private Colleges	2%	5%	4%
	100% (369)	100% (545)	100% (914)

* Beloit, Carleton, Coe, Colorado College, Cornell College, Grinnell, Knox, Lawrence, Macalester, Monmouth, Ripon, St. Olaf.

Antioch, Bowdoin, Bryn Mawr, Hampshire, Haverford, Middlebury, Oberlin, Pomona, Reed, Swarthmore.

+ A group of 19 schools, including such schools as Bates, Denison, Earlham, Kalamazoo, Lake Forest, and Tufts.

Another concern of this research was to find out what non-applicants know about Carleton as compared to what they know about the school they decided to attend. In a word, we found that non-applicants know very little about Carleton and much more about the school they chose to attend. Or, to put it differently, they were rarely able to agree or disagree with 25 statements possibly characteristic of Carleton, while they were almost always able to characterize the college they are attending. Table 3 shows the 25 characterizations and the proportion who checked "Don't Know" for each, both with respect to Carleton and to the school they are attending. (The characterizations are ordered according to the size of the "Don't Know" percentage for Carleton.)

One would expect these students to have more knowledge about the college they're attending than about Carleton, but note that they know about characteristics of Carleton in very different degrees. Less than half (42 percent), for example, feel unsure about Carleton's academic reputation and rigor, while student social life and faculty characteristics, etc., are much less well known (67 percent and 68 percent "Don't Know"). Of course, knowledge of these two characteristics is best communicated by current students or through a campus visit. While 31 percent of the non-applicants knew someone attending Carleton (as opposed to 44 percent of the acceptances), only 16 percent visited the campus (as opposed to 59 percent of the acceptances).

The non-applicants were also asked whether they felt the 25 characteristics of a college shown in Table 5 apply to their "ideal college." In only a small number of areas do they disagree; that is, they appear to be equally concerned about leading a relatively wild versus a relatively sedate social life. They also disagree about the importance of intercollegiate athletics in a college experience. Again, 56 percent don't know what Carleton is like, but most of those who have an opinion perceive correctly that athletics are not emphasized. (Intercollegiate athletics are enjoyed primarily by the participants and largely ignored by the rest of the student body, though more than half of the men and an increasing percentage of the women participate in varsity athletics.) Lastly, these non-applicants disagree about how much study and preparation should be part of their ideal college life. While 57 percent agree that study and preparation should be intensive, 26 percent feel that it should not. Only 2 percent perceive Carleton as not requiring intensive study and preparation. These data suggest that a good number of the non-applicants perceive Carleton as being neither wild enough nor prim and proper enough, insufficiently involved in varsity athletics, and too serious about academics. **We concluded that better information about Carleton would probably only have made the majority more determined not to apply for admission; on the other hand, it might very well have increased the desire of the remainder to apply.**

In both this non-applicant study and the yield study, respondents were given a list of possible sources of information about Carleton and asked to check which had served them; which had been first; and which had proved the most important. The data are not revealing except to show that non-applicants hear about Carleton less from high school counselors, friends who attended, and admissions representatives and slightly more from published sources. Of course, as was mentioned earlier, only 16 percent of the non-applicants visited the campus, whereas 59 percent of the acceptances did.

Region of residence doesn't seem to affect the likelihood of hearing about Carleton from different sources except from high school counselors in the South. Non-applicants from the South were 20 percent less likely to hear about Carleton from a high school counselor.

In summary, the channels of information to non-applicants seem to be similar to those for acceptances with the small exceptions noted. *What gets channeled and how much* has already been discussed to the extent that we have data.

The question of greatest import, of course, remained: why hadn't the non-applicants applied? **Those students who were accepted note location, cost, and talks with Carleton friends as producing the greatest percentage of negative reactions. For non-applicants, location and cost seem most important.** The picture is not quite that simple, however, because different things matter more to students from different regions of the country.

The following data, for example, illustrate Carleton's precarious relationship to two important markets: the Midwest and the East. Carleton is too expensive for many students from the Midwest who like its location and academic reputation. For Eastern students, Carleton is not quite as high in prestige as a number of small Eastern colleges are, even though they can afford to attend. In addition, Eastern students are not particularly attracted to the idea of spending four years in a small town in rural Minnesota.

Table 5 shows the percentage of non-applicants who felt Carleton's cost was a negative factor by respondent's region of residence. As can be seen, Eastern non-applicants rarely found Carleton's cost to be a negative factor, while almost half of the Midwestern applicants did.

Table 5
Percent terming cost a negative factor

Region of Residence	*% Cost Negative*
Midwest	47% (273)
South	36% (70)
West	36% (59)
East	13% (87)

Table 6 shows the percentage who said that location was a negative factor by region of residence:

Table 6
Percent terming location a negative factor

Region of Residence	*% Location Negative*
East	74% (88)
West	59% (59)
South	48% (71)
Midwest	38% (278)

Eastern Students clearly found Carleton's location a problem, as did a significant proportion of Westerners. In addition, as Table 7 shows, they less frequently found Carleton's academic reputation a "very positive" influence on their desire to apply.

Table 7
Percent terming academic reputation a positive factor

Region of Residence	*% Very Positive*
Midwest	67% (278)
South	61% (71)
West	55% (60)
East	43% (87)

These data illustrate Carleton's marginality to the Eastern and Midwestern markets. The confirmation of this market marginality, together with other insights gained from the non-applicant group, have provided Carleton with a base for numerous suggestions about how it can begin to tap that pool of prospectives who make inquiries but who never actually apply. These suggestions will be summarized at the end of the paper when the results of the yield study can also be taken into account.

Yield[6] *study*

Having analyzed why prospective students who have a contact with the admissions process do not apply, let us now turn to a different question: what affects an accepted applicant's decision to enroll or not to enroll? As Table 8 illustrates, slightly more than one-half of Carleton's acceptances choose to enroll. When this yield figure is compared to that of other private liberal arts colleges, it becomes evident that Carleton's yield is neither exceptionally good nor exceptionally bad.

If Carleton's yield is not so bad, why study what affects it? There are two reasons: 1) if the yield were increased, Carleton could become more secure in its recruiting position; and 2) by studying what affects yield, various aspects of the admissions process can be evaluated. It was with these two goals in mind that we decided to survey all applicants accepted for freshman admission to Carleton in 1974. In order to achieve the highest possible response, the questionnaire was sent with the applicant's acceptance letter. In fact, the questionnaire was made the vehicle through which an applicant indicated his acceptance or rejection of Carleton's offer. In this way 896 questionnaires were received, or 91 percent of all applicants accepted. Questionnaires were received from nearly 100 percent of those who accepted the offer of admission. By any standard the overall rate of return was high.

Table 8

Yields for a group of colleges and universities

*ACM Schools – 1973**		*Select Small Colleges – 1971#*	
St. Olaf	62.5%	Hampshire	65%
Carleton	50.1%	Bowdoin	59%
Colorado	49.9%	Antioch	54%
Cornell	49.2%	Bryn Mawr	54%
Grinnell	45.0%	Oberlin	53%
Knox	44.7%	Haverford	49%
Lawrence	41.8%	Swarthmore	49%
Ripon	41.6%	Pomona	48%
Coe	40.9%	Middlebury	43%
Macalester	40.5%	Reed	39%
Beloit	38.5%		
Monmouth	35.8%		
Little Three – 1971#		*Ivy League – 1971#*	
Amherst	62%	Harvard	82%
Williams	56%	Dartmouth	62%
Wesleyan	53%	Brown	61%
		Yale	60%
		Cornell	54%
Seven Sisters – 1971#		Princeton	54%
Radcliffe	80%	Columbia	51%
Wellesley	64%	Penn	51%
Vassar	52%		
Smith	51%		
Pembroke	49%		
Mt. Holyoke	48%		
Barnard	47%	Stanford	62%

*Source: ACM Colleges Annual Admissions Report for 1973.
#Source: Douglas D. Dillenbech and Sue Wetzel, eds., *The College Handbook, Parts I and II*, The College Entrance Examination Board, 1972.

[6] Yield is defined here as the percentage of acceptances who subsequently enroll.

Data were obtained through the yield questionnaire on three broad classes of variables, and variables of each class will be examined below as possible causes of variation in the likelihood that a student accepted the offer of admission. The three included: 1) characteristics of the individual (sex, scholastic aptitude, region of residence, socio-economic background, etc.); 2) elements of Carleton's admissions process (the interview with an admissions representative, the campus visit, etc.); and 3) characteristics of Carleton (academic reputation, cost, location, size, etc.). In the case of the third set of variables, what is important is how prospective students viewed Carleton, not how the Carleton community views itself. In addition, the effect of these three classes of variables on yield was examined, taking into account whether or not Carleton was the prospective student's first choice. This statistical control procedure was necessary because the ways in which students rank the colleges to which they have applied at the time of application are highly related to the choices they make after acceptances have en received. As Table 9 shows, 84 percent of Carleton's acceptances who said Carleton was their first choice at the time of their application enrolled at Carleton in the Fall of 1974. On the other hand, only 15 percent of the students who were accepted at another school that was specified as their first choice decided to attend Carleton instead.

Table 9

Choices of Carleton enrollees

	% Enrolling at Carleton
Carleton First Choice	84% (338)*
Non Accepted at First Choice	53% (163)
Accepted at First Choice Which Was Not Carleton	15% (227)

*The number in parenthesis is the number of acceptances for whom Carleton was the first choice.

These data suggest that the best test of effectiveness of certain aspects of the admissions process on yield would be to see how some factor affects yield for those acceptances not designating Carleton as their first choice. Since not all acceptances not designating Carleton as their first choice school were in fact accepted by their first choice school, an even better test would be to assess the impact of some factor among those who were accepted at their first choice when that was not Carleton.

To help clarify these concepts, those for whom Carleton was not first choice and who were not accepted at their first choice school will be called "reluctant;" and those who were accepted at their first choice school when that was not Carleton will be called the "hard to get" group.

Analysis

Carleton's group of acceptances for the Fall of 1974 was in no way a cross section of all high school seniors accepted at college. Males and females were enrolled in almost identical numbers; median SAT scores were 660M and 630V; and 50 percent ranked in the top 5 percent of their high school graduating classes. The regional distribution was 17 percent from the East, 60 percent from the Midwest, 9 percent from the South, 12 percent from the West, and 2 percent from foreign countries. Eleven percent were non-white, and 78 percent came from public high schools. The median annual income of their families was about $25,000. The question that needs answering, however, is: do acceptances who differ on any of the above background factors enroll at Carleton in different proportions?

Analysis shows that they do in a couple of ways: differences in SAT scores and in region of residence produce differing yield rates. In each case, however, the relationship is altered when college preference is controlled. As noted in Table 10, when Carleton was an acceptance's first choice, an almost equal percentage of students was enrolled from each of five SAT score groupings. However, when Carleton was not the acceptance's first choice (regardless of whether or not the student was accepted at his first choice), Carleton enrolled a decreasing percentage of acceptances as their SAT scores increased. Thus, 73 percent of the "reluctant recruits" with math SAT's in the 220–550 range enrolled, but only 38 percent of those whose math SAT's were in the 710–800 range. Likewise, 31 percent of the "hard to get" group whose math SAT's were in the 200–550 range enrolled, but only 9 percent of those whose math SAT's were in the 710–800 range. **These data mean that when Carleton is not a student's first choice, the College's drawing power decreases with increases in the aptitude of the student as measured by SAT scores.**

Table 10

Applicant distribution by SAT scores

	Verbal			Math		
Score	Carleton 1st Choice	Reluctant Recruits	Hard to Get	Carleton 1st Choice	Reluctant Recruits	Hard to Get
200–500	80% (85)	70% (27)	27% (41)	86% (51)	73% (22)	31% (29)
560–600	78% (60)	41% (29)	20% (40)	80% (49)	67% (27)	16% (38)
610–650	80% (66)	52% (59)	13% (54)	84% (61)	59% (29)	20% (41)
660–700	94% (63)	50% (30)	12% (52)	85% (71)	47% (36)	11% (45)
710–800	84% (38)	53% (17)	6% (36)	81% (80)	38% (48)	9% (70)

Such data are not particularly surprising. Students with very high SAT's who were accepted by their first choice school when that wasn't Carleton most probably went to Carleton's toughest competition. The lower SAT "hard to gets," on the other hand, probably saw Carleton as higher in quality than their first choice school.

The only other factor related to Carleton's yield is region of residence. As Table 11 illustrates, Carleton obtains a much higher yield in the Midwest and South than it does from either coast.

Table 11

Enrollees by region of residence

Region of Residence	Percent Enrolling
Foreign	76% (17)
Midwest	60% (535)
South	60% (77)
West	42% (105)
East	36% (157)

As table 12 illustrates, when Carleton is a student's first choice, its yield by region becomes much more equal, and conversely, when Carleton is not the student's first choice, the region of residence has a very large effect on yield.

Table 12

Region of residence when preference controlled

Region of Residence	*Carleton 1st Choice*	*Percent Enrolling Reluctant Recruits*	*Hard to Get*
East	88% (25)	38% (42)	6% (51)
Midwest	85% (238)	59% (82)	21% (119)
South	85% (26)	73% (15)	19% (21)
West	69% (39)	50% (20)	6% (33)

Of course, region of residence is also related to the probablity that Carleton will be a student's first choice. Only 21 percent of all Eastern acceptances labelled Carleton as their first choice, while 54 percent of those from the Midwest and 42 percent from the South and West did. **One must conclude that region of residence affects both the likelihood that an acceptance will have Carleton as a first choice and the likelihood that he will enroll if Carleton is not his first choice.**

The questionnaire sent to accepted applicants also probed the question of where students receive knowledge of Carleton. Accepted applicants were asked to study a list of possible sources and to note whether an item provided information for them; whether it was the first source; or whether it was the most important source of information. Responses to this question indicate that there is a great diversity both of first sources of information and most important sources. Although no one source seems to dominate in importance, 26 percent of the acceptances claimed that their parents were their first source. Only 13 percent checked "campus visit" as a source, even though 59 percent of the acceptances visited the campus. These students must not equate a campus visit with a "source of information." Finally, alumni representatives rarely functioned as sources of information (20 percent), as first sources (1 percent), or as most important sources (4 percent). (This trend is important only because Carleton was trying to establish a more effective alumni rep program.) Alumni who were friends of acceptances ("A friend who attended Carleton") did seem to be important sources, however, as distinguished from general alumni representatives. This is a distinction worth noting. **Though the alumni rep program seems not to be a large source of information for prospective students, alumni are.**

No difference in yield rates was found when acceptances who received information about Carleton from a given source were compared to acceptances who did not. That is, an acceptance who received information about Carleton from his parents, for example, was no more likely to enroll than one who received no information from his parents.

One of the most important areas of concern in the yield study was the impact of contacts with admissions personnel. Sixty-seven percent of Carleton's acceptances had had some contact with admissions personnel — either in an interview on the campus or during a high school visit or college night. Accepted applicants were asked the following question: "What influence did a talk with an admissions representative have on your desire to attend Carleton?" Table 13 shows the responses:

Table 13
Influence of admissions representative

Greatly Increased Desire to Attend	30% (177)
Slightly Increased	39% (235)
No Influence	25% (148)
Slightly Decreased	5% (28)
Greatly Decreased	1% (9)

By and large, accepted students (69 percent) reported that they were positively influenced by admissions personnel. Only 6 percent reported that their talk with an admissions representative decreased their desire to attend.

The important question here, however, was whether those who reported being positively influenced by admissions personnel in fact enrolled in greater proportions than those who said that they were negatively influenced. As Table 14 shows, 69 percent of those who said a talk with an admissions person greatly increased their desire to attend Carleton enrolled, while only 15 percent of those who said the talk did not increase (combination of no influence plus slightly and greatly decreased)[7] their desire to attend in fact enrolled. When acceptances were affected positively by admissions personnel, they were more likely to enroll and vice versa.

Table 14
Reactions to talk with admissions rep

Reaction	*Percent Enrolling*
Greatly Increased Desire	69% (177)
Slightly Increased	61% (233)
No Influence or Decreased	51% (185)
No Contact With Admissions Rep	44% (170)

It is among the reluctant recruits that the effect of contacts with admissions personnel was the largest. When someone had been turned down by his first choice school but was accepted by Carleton (reluctant recruits), memory of his talk with one of Carleton's admissions personnel was very important in deciding whether to enroll at Carleton or elsewhere. Students in this category were 29 percent more likely to enroll at Carleton when their talk with an admissions person greatly increased their desire to attend than when the talk had no influence or a negative influence. These data thus illustrate the importance of positive admissions contacts.

[7] Because in many instances, including this one, there was a smaller number of acceptances who reported any negative influence, we have combined no influence, slightly decreased, and greatly decreased into one category. While this maneuver tends to understate the effect of a given variable on yield, it does preserve our ability to determine the *relative* effect of different elements of the admissions process on yield. It also allows us to make consistent comparisons throughout the report.

Table 15 *Reactions to talk when preference controlled*			
Reaction to Talk	*Carleton 1st Choice*	*Reluctant Recruits*	*Hard to Get*
Greatly Increased	92% (87)	69% (29)	24% (38)
Slightly Increased	80% (99)	52% (48)	24% (44)
No Influence or Decreased ...	82% (73)	40% (30)	14% (51)
No Contact	78% (55)	52% (48)	10% (67)

An equally important aspect of the admissions process was the campus visit. Sixty-five percent of the acceptances who visited the campus enrolled, compared to only 41 percent of those who did not. Since those who designated Carleton as their first choice were the most likely to visit the campus, one would expect that the effect of the visit on yield would decrease when college preference was controlled. In general, that was true, as Table 16 shows:

Table 16 *Influence of campus visit when preference controlled*			
Campus Visit	*Carleton 1st Choice*	*Reluctant Recruits*	*Hard to Get*
Yes	85% (241)	62% (81)	22% (104)
No	80% (94)	46% (81)	10% (119)

Without college preference controlled, those who had visited the campus were 24 percent more likely to have enrolled. With college preference controlled, the largest difference was found for "reluctant recruits," who were 16 percent more likely to have enrolled had they visited the campus. Thus, it appears that among groups similarly disposed with respect to enrolling at Carleton, the effect of visiting the campus was positive but small.

When acceptances' reactions to the visit were taken into account, however, the effect of the visit proved to be much greater. Table 17 below shows the percent who enrolled at Carleton by reaction to the campus visit. Among acceptances who said that the visit greatly increased their desire to attend, 78 percent attended. Among those who said it had no influence or a negative influence, only 29 percent enrolled at Carleton — a 51 percent differen The reaction to the visit also remained strong even after college preference was controlled, as Table 18 shows on the following page.

Table 17 *Reaction to campus visit*	
Reaction to Visit	*Percent Enrolling*
Greatly Increased Desire to Attend	78% (318)
Slightly Increased	53% (113)
No Influence or Decreased	27% (88)
No Visit	41% (372)

Table 18
Reaction to visit when preference controlled

Reaction to Visit	*Carleton 1st Choice*	*Reluctant Recruits*	*Hard to Get*
Greatly Increased	90% (177)	70% (54)	43% (42)
Slightly Increased	88% (42)	42% (12)	8% (36)
No Influence or Decreased	37% (19)	45% (20)	6% (31)

No study of yield would be complete without considering the impact of financial aid. Two kinds of data were thus obtained from acceptances about financial aid. The first was their response to a question about whether the offer of financial aid had been a positive or negative influence on their decision. The second was whether or not aid was in fact offered. Fifty-one percent of the respondents indicated that the offer of financial aid had no effect on their decision to enroll, while 25 percent said that it had a positive effect, and 24 percent said that the effect was negative. As before, however, actual yield rates must be examined before an effect can be attributed to some factor. As Table 19 shows, the response of acceptances to the financial aid offer, if one was made, did affect yield.

Table 19
Reaction to financial aid offer

Reaction to Aid Offer	*Percent Enrolling*
Positive	64% (220)
No Influence	55% (456)
Negative	43% (216)

The size of the effect remained the same -- about 20 percent — for each subgroup when college preference was controlled in the above relationship.

Another way to look at this factor is to examine yield percentages for different actual financial aid categories, as shown in Table 20.

Table 20
Enrollees requesting and receiving aid

Aid Offer	*Percent Enrolling*
Aid Offered	63% (320)
No Aid Requested	53% (452)
Aid Requested but not Offered	37% (119)

The data shows that when aid was offered, Carleton's chance of enrolling a student was higher by 26 percent. When college preference was controlled, however, the effect of an offer of aid decreased somewhat, as Table 21 shows.

Table 21

Influence of aid when preference controlled

Aid Offer	Carleton 1st Choice	Reluctant Recruits	Hard to Get
Aid Offered	84% (147)	62% (47)	23% (69)
No Aid Requested	88% (153)	50% (94)	12% (113)
Requested, Not Offered	64% (36)	50% (22)	10% (40)

Offers of aid had the greatest effect on those who held Carleton as a first choice, and the effect was mainly negative. That is, when financial aid was refused for someone whose first choice was Carleton, the chance of enrolling him decreased by about 20 percent.

In addition to all of the above, analysis of the yield study showed that the parents of acceptances were crucial to students when they decided whether or not to attend Carleton. Forty-three percent of the acceptances said that their parents were a source of information about Carleton; 26 percent said they were the first source; and 10 percent said that they were the most important source. More significantly, however, parents' reactions to Carleton affect yield. Table 22 shows the percent of acceptances who enrolled by parents' reaction to Carleton, and Table 23 shows that the effect of parents' reaction remains very strong once college preference is controlled. Even when Carleton was the student's first choice, if the parents' reaction was negative, the probability of enrolling declined substantially. When parents had a positive reaction to Carleton, on the other hand, the yield was much higher in each of the three categories of choice.

Table 22

Influence of parents' reaction to Carleton

Parents' Reaction	Percent Enrolling
Greatly Increased Desire to Attend	77% (135)
Slightly Increased	65% (265)
No Influence or Decreased	41% (275)

Table 23

Influence of parents when preference controlled

Parents' Reaction	Carleton 1st Choice	Reluctant Recruits	Hard to Get
Greatly Increased	96% (70)	69% (32)	29% (21)
Slightly Increased	86% (115)	63% (49)	20% (56)
No Influence or Decreased	67% (82)	38% (52)	16% (96)

Several other kinds of personal contacts also play a part in determining Carleton's yield, according to the survey. In particular, the role of the high school counselor is important, as Table 24 indicates. When Carleton was a student's first choice, the reaction of his high school counselor did not matter in his decision to enroll or not. **When Carleton was not the student's first choice, however, and especially when a student had been rejected by his first choice, the reaction of the high school counselor became very important.** The problem is that students were less likely to say that a high school counselor "greatly increased their desire to attend" Carleton than they were likely to say that other things positively affected their desire to attend. Only 10 percent said a high school counselor greatly increased their desire to attend, as compared with 18 percent for parents, 30 percent for present Carleton students, 22 percent for admissions personnel, and 40 percent for the campus visit. Just 4 percent said the high school counselor decreased their desire to attend. Therefore, when high school counselors reacted positively to Carleton, they affected yield.

Table 24

Influence of high school counselor

Reaction of H.S. Counselor	*Carleton 1st Choice*	*Reluctant Recruits*	*Hard to Get*
Greatly Increased Desire	89% (27)	77% (22)	35% (20)
Slightly Increased	83% (64)	61% (33)	11% (44)
No Influence or Decreased	83% (154)	52% (64)	14% (93)

One of the consistent findings of the non-applicant study was the negative effect Carleton's location has on students' desire to apply. So, too, does location negatively affect yield. When a student defines location as a negative characteristic of Carleton, he is less likely to enroll, even when Carleton is his first choice. For example, 37 percent of the acceptances reported that they thought Carleton's location was a negative factor in their decision. Table 25 shows the effect location has on Carleton's yield, even after the effects of college preference have been controlled. As might be expected, Carleton's location was much more of a problem for acceptances on the East Coast. Sixty-three percent of them saw it as a negative factor, while that was true for only 52 percent of those from the West, 51 percent of those from the South, and 31 percent of those from the Midwest. While some of this response may be attributed to distance away from home, at least an equal part of the negative reaction must be caused by Minnesota's relatively bland landscape when compared with what other states have to offer. This seems to be a particular problem for East Coast students.

Table 25

Reaction to Carleton's location

Reaction to Location	*Carleton 1st Choice*	*Reluctant Recruits*	*Hard to Get*
Positive	86% (242)	62% (69)	29% (85)
Negative	74% (66)	41% (78)	7% (126)

Discussion

Carleton's non-applicant and yield studies produced a myriad of findings which illuminate different aspects of the Carleton admissions picture. Non-applicants who had made sufficient contact with Carleton's admissions process to warrant a file were found to be equally qualified and equally financially able to attend Carleton as acceptances. As a group, however, they knew very little about Carleton, and some clearly described an ideal college that differed in some important (to them) way from Carleton. Carleton's marginality to its Eastern and Midwestern markets was also demonstrated.

A number of factors were also found to affect Carleton's yield, even after initial college preference was controlled. When Carleton was not a student's first choice, the College enrolled a decreasing percentage of acceptances as their SAT scores increased. Students from the East and West Coasts were less likely to enroll than students from the Midwest and South. When a student had a positive contact with an admissions representative, he was more likely to enroll, especially if he was a "reluctant recruit" (accepted at Carleton but not at his first choice). Regardless of college preference, students who had a positive reaction to a campus visit were much more likely to enroll when compared with those who said the campus visit had no influence or decreased their desire to attend. Parents' reaction to Carleton also affected yield, as did the offer of financial aid. When Carleton was not the student's first choice, a positive reaction to Carleton by the high school counselor increased the likelihood that a student would enroll. And finally, when students had a negative reaction to Carleton's location, they were less likely to enroll.

What conclusions about admissions policy should be drawn from all of the above? Suffice to say, it is clear from the non-applicant study that there is an untapped pool of qualified prospects who desire a college very much like Carleton and who even go so far as to contact a representative of the College. This group must be pursued more aggressively, and some fraction must be turned into applicants. Further, it is obvious from the yield study that certain types of action could increase Carleton's yield. Most would involve increasing the percentage of positive contacts students have with aspects of the admissions process and decreasing the percentage of negative contacts. While this may sound like a trivial conclusion, [illegible]reatest value of the yield study lies in showing *which* of the many things that co[illegible]ect yield actually do. *How* to change the things which affect yield for the [illegible] not something which can be deduced from this particular research.

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The Minnesota Private College Research Foundation
Minneapolis, Minnesota

3
Chapter

How High School Seniors Choose a College

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This report presents the findings of research conducted by the Minnesota Private College Research Foundation before it developed a media campaign to promote the general value of a liberal arts education and those private institutions in the state intimately involved in offering one. Made possible by a grant from Northwest Area Foundation, that campaign strategy will be made available to other states on a nationwide basis in mid-1976 if it proves effective in Minnesota.

Before conducting such a media campaign — indeed, in order to conceive and produce one — it was first necessary to understand, with some precision, how high school seniors perceive liberal arts colleges. To this end, the Minnesota Private College Research Foundation directed Mid-Continent Surveys to conduct a personal interview survey of high school seniors ranking in the upper-third of their class. Two geographic areas were designated for interviews so that the data would reflect no single educational, ethnic or economic bias.

With the survey information in hand, two important objectives could be met. First, it would be possible to create a media message that would reinforce the perceived strengths of private colleges and also supplement the general perception with additional information.

Secondly, it would provide baseline data against which the campaign's effectiveness could be measured. This was to be achieved by repeating the survey a year after the media campaign had been conducted.

As important as these objectives were, however, there was yet another benefit to be derived from the survey information: to the best of our knowledge, it was one of the few first-hand market surveys of high school students' perceptions of private colleges.

Furthermore, the survey ascertained how high school students make post-secondary educational decisions, how they perceive private colleges to be different from university and state-supported colleges, and finally how they judge the advantages and disadvantages of each higher educational system.

Faculties and administrators should be aware of these perceptual "facts"; if for no other reason, they sometimes provide re-confirmation of present assumptions. Where present assumptions are not confirmed, it is hoped that the college or university will re-examine itself and ask what that discrepancy might mean in the future.

Research methodology

1. *Sampling*

The population sampled was high school seniors in the upper one-third of their class in schools located in the ten-county Twin Cities area and in the Austin-Albert Lea area.

In the Twin Cities area, both public and private high schools were included in the sampling frame. However, six public high schools were not included because names of seniors and/or their class ranks were not available. In the Austin-Albert Lea area, all public and private high schools were included.

After eliminating those students in each school who were at or below the 66 percentile ranking for their school, the staff of Mid-Continent Surveys selected a systematic sample, using a random start and skip interval.

For every "target" student selected in this fashion, an alternate student was selected to be interviewed (in case the target student was not available or refused to participate).

This sampling procedure resulted in a proportionate sample — i.e., the number of students sampled from a given school was in the same proportion as the school's number of qualified (upper one-third) students relative to the total number of qualified students in the universe.

2. *Interviewing*

All interviewers who worked on this project attended a briefing session conducted by Mid-Continent Surveys' Interviewing Director. At this session, the sampling procedure and questionnaire instructions were explained in detail, and model interviews were conducted.

A total of 400 personal interviews — 300 in the Twin Cities and 100 in the Austin-Albert Lea area — were completed in high school seniors' homes between February 28 and April 4, 1975.

All completed questionnaires were edited for completeness and internal consistency, and 10 percent of the interviews were validated by sending a postal card to the student verifying the interview.

3. *Data tabulation*

The completed questionnaires were coded for electronic tabulation; the data were keypunched and verified; and the data were computer-tabulated.

Summary of research

College or not?

At the time of the survey, 99 percent of the 400 students* had determined what they wanted to do after graduation. Sixty-eight percent stated that they were planning to attend a four-year college or university; 24 percent were planning to attend either a junior college or a vocational-technical school; and 9 percent were planning to get a job or enter the military service. Males were more inclined to enroll at a college or university (79 percent) than females (62 percent). Parents who had attended college produced children more likely to attend college (83 percent) than children of non-collegiate parents (51 percent). In terms of household income, 88 percent of the students from families in the $25,000 and above group planned to attend college, 71 percent of those in the $15,000–$24,000, and only 54 percent of students in the below $15,000 category. Seventy-three percent of the Twin Cities students, as compared to 54 percent of the Austin-Albert Lea students, planned to enroll at a college or university.

When students make the decision

Referring to the 334 students who had decided to attend a four-year institution, **15 percent first began thinking about it before their junior year, 47 percent during their junior year, and 37 percent during their senior year.** There is little influence of such factors as geographic location, sex, household income or parents' education on the issue of when students begin thinking about attending college.

Number of institutions considered

The students were asked how many colleges or universities they had considered. The median was three: 8 percent considered only one, 29 percent considered two, 36 percent considered three, 17 percent considered four, and 10 percent considered five or more.

What types of colleges and universities have you considered, and why?

	Type of Institution Considered			
WHY?	*State U*	*State College*	*Junior College*	*Private College*
Have courses that interest me	50%	44%	35%	41%
Quality of education	27	12	6	42
Tuition and costs	28	20	37	4
Financial aid is available	3	3	1	6
Location is nearby	48	18	54	27
Parents/relatives went there	13	20	13	32
Small school and classes	9	18	16	27
Visited and like it	9	17	4	21
It is a church-related college	–	2	5	26
(Number of students)	(234)	(132)	(79)	(182)

From the above data, it appears that the private college competes with the university** in the consideration process of students. While the university appears to offer the advantage of courses of interest, close location, lower tuition and quality of education, **a private college is perceived as offering the advantage of a higher**

*For the sake of convenience and brevity, the word "student(s)" will refer to high school seniors who rank academically in the upper third of their class.

**Note that "university" refers to the University of Minnesota or other major universities, such as the University of Wisconsin at Madison, the University of Iowa, etc.

quality education, courses of interest, small classes and campus, close location, and church-relatedness.

Number of colleges and universities applied to

However vague and ill-defined the word "considered" may be, the term "applied to" is quite specific. Here the study, most of which was conducted during the month of March 1975, found that 52 percent of the senior students had applied to one college or university, 19 percent had applied to two, and 10 percent had applied to three or more. Students from households with incomes below $15,000 tended to apply to only one or two (70 percent), while those above $25,000 were far more apt to apply to three or more institutions (20 percent) than the below $15,000 income level (6 percent).

Role of parent(s) in the student's decision process

Each student was asked about the role his or her parents played in his choosing a college or university. **Apparently parents have little more than a suggestive influence.** None stated that the parent "really made the choice for me," and only 6 percent of the students said parents strongly urged a specific school. The majority (52 percent) stated that the parental role was one of "suggesting one or more schools" while 42 percent stated there was "no parental influence on my decision."

Parents who had attended a private liberal arts college tended to be more directive in the "suggestion process" than university parents. Here 69 percent of the private college parents "suggested one or more schools" as compared to 51 percent for the university parents. The same percentage spread exists when comparing household income, with those above $25,000 being more suggestive than those with income below $15,000 (64 percent *vs.* 46 percent).

Which parent was more influential

Of the 58 percent who stated that the parent(s) had influenced the decision, 32 percent credited both parents; 15 percent said it was mostly or all mother; and 12 percent said it was mostly or all father. But here again, as in the prior question, household income is a factor. Four percent of students from households below $15,000 stated that the father was primarily the influencer, as compared to 20 percent for students in the $25,000 and above category. Twenty-one percent of the under $15,000 category said it was all or mostly mother, as compared to only 9 percent for the $25,000 and over category. The under $15,000 category received the least influence from both parents and the over $25,000 received the most.

How did parents influence your decision?

	Total Student Sample	Household Income: Under $15,000	$15,000-$24,999	$25,000 Or Above
Yes — Parent(s) Did Influence Me				
. . . all or mostly father	12%	4%	12%	20%
. . . all or mostly mother	12	21	14	9
. . . both parents equally	32	24	31	40
No — Parent(s) Did Not Influence me	42	51	44	29
	100%	100%	100%	100%
Number of Students	(334)	(87)*	(151)*	(72)*

*Seven percent of the students did not know the family income and two percent would not reveal the family income.

Familiarity with Minnesota's state scholarship program

In view of the fact that 57 percent of the students are planning to finance a portion of their educational costs with a scholarship, familiarity with the Minnesota State Scholarship Program could be crucial in helping them finance the more costly types of education or to even consider a private college.

Ninety-two percent knew that Minnesota has a scholarship program, but only 17 percent were "very familiar" with it. The remaining 83 percent ranged from being "somewhat" (37 percent) to "not at all familiar" (11 percent).

Students from household incomes of below $25,000 are more familiar with it than those above $25,000 by a 2 to 1 ratio. Comparing the under $15,000 category with the $15,000–$24,999 category, there appears to be equal familiarity. Overall, 45 percent of the students either did not know about the program, did not know if they were eligible, or believed that they were ineligible.

How familiar are you with the Minnesota State Scholarship Program?

	Total Student Sample	Household Income: Under $15,000	$15,000-$24,999	$25,000 or Above
Very familiar	17%	23%	19%	11%
Somewhat familiar	37	41	40	25
A little familiar	27	21	26	36
Not at all familiar	11	9	9	14
Don't know if Minnesota has a program	8	6	7	14
	100%	100%	100%	100%
Number of Students	(334)	(87)	(151)	(72)

Are you eligible for the Program?

	Total Student Sample	Household Income: Under $15,000	$15,000-$24,999	$25,000 or Above
Yes	55%	70%	59%	35%
No	18	6	19	31
Don't know	19	18	15	21
Don't know if Minnesota has a program	8	6	7	14
	100%	100%	100%	100%

Most important factors that students consider when che ·ing a college

Each student was asked to prioritize 15 factors that he or she might weigh in choosing a college using the Polydiagnostic Technique. That is, the student was asked to select three of 15 factors which were most important to him/her. Then, from the remaining 12, the student selected the three which were next most important, etc. These factors are listed below in order of most to least important, along with their index numbers (most important was weighed 100, least important was weighed 0).

What did you consider in choosing a college?

Number of Students	(334)	(87)	(151)	(72)	
School ranks high scholastically and has good facilities in the field in which I am interested					89
The tuition ar·d fees are within my budget					68
It is a school which offers many choices for a major					65
The school has small-sized classes with a good student-faculty ratio					65
The school is very good in placing graduates in jobs and/or in getting their students into graduate school					63
It is a small school where you get to know the students and faculty					54
More scholarships and financial aids are available there					49
The students have a great deal of personal freedom					48
The people associated with the college contacted me and made me feel I was really wanted there					42
My parents or family really want me to go there					34
My high school teacher/counselor urged me to go there					25
My friends are going there					24
The school is far enough away from my home					21
I like their athletic programs and may be able to get on the team					21
School has a religious tradition					19

It appears from this rank ordering that the students place primary emphasis on the quality of their education. Next comes the cost of attending college, the variety of majors, and the smallness of classes or student-to-faculty ratio. The fact that a college has a religious tradition or an athletic program ranks at the bottom of the scale.

First choice college or university and why

The interview process began by questioning which types of colleges or universities the student had *considered*; next, which one(s) the student had *applied* to; and finally, assuming that there would be no problem in being admitted, which college or university is the *first choice*.

The university was the most popular "first choice" of 40 percent of the students, and a private college was the first choice of 32 percent of the students. The third most popular was a junior college (first choice of 16 percent), followed by a state college (12 percent).

Among Twin Cities students, there is a stronger preference for the university and private colleges than the total group, and a weaker one for either junior or state colleges. The impact of a junior college on its surrounding community is perceptible in the case of Austin-Albert Lea. Here the junior college (presumably Austin State Junior College) displaces the private college as being the second most popular institution. Males were much more inclined to select a private college than females (41 percent vs. 26 percent).

Despite their increased ability to afford a private college, students from the wealthiest families were more inclined to attend the university. Students from households below $15,000 were the least interested in private colleges.

What type of college do you prefer?								
		Home is		Sex		Family Income		
	Student Sample	Twin Cities	Austin Albert Lea	Male	Female	Under $15,000	$15,000–$24,999	$25,000 and Over
State U	40%	42%	33%	43%	37%	37%	38%	44%
State Col.	12	9	23	6	16	14	14	8
Jr. Col.	16	11	29	8	21	23	16	6
Pr. Col.	32	35	21	41	26	23	34	38
Don't know/ not sure	3	4	—	4	3	3	1	7
	102%	101%	105%	102%	102%	100%	103%	103%
NUMBER OF STUDENTS	(334)	(254)	(80)	(134)	(200)	(87)*	(151)*	(72)*

The data were collected and arranged in a manner allowing for analysis of out-migration from the state, which is an issue of increasing importance since reciprocal agreements have been arranged among state-supported institutions in Minnesota, Wisconsin, and North and South Dakota. Of the 334 students who intend to enroll this fall, 255 would do so in Minnesota, while 72 would leave the state. Of the 72 students, about half intended to attend an out-of-state university and half would attend an out-of-state private college.

Why is the university your first choice?

After the student was asked for his or her "first choice," reasons for the choices were solicited on an open-ended basis. The top three university-related factors are 1) course offerings of interest, 2) cost, and 3) close to home.

Surprisingly little mention is made of the quality of education (14 percent), academic recognition (8 percent), low student-teacher ratio (2 percent), or good faculty (5 percent). These data show a major inconsistency between the students' original emphasis on quality (see page 9) and why they selected the university. However, the cost issue remains consistently important.

Advantages of the university?	Total Student Sample
Have courses I am interested in/they have a good . . . Department/Program	53%
Not as expensive/with my budget	30
Close to home/close by	29
Variety of classes/more majors	15
Quality of education — good academically/one of the best	14
Small/not too big	13
Has a good reputation/scholastic recognition/a good name/prestige	8
Good teachers/faculty	5
Student/teacher ratio small	2
(Base for percentages)	(132)

NOTE: Other advantages were given but none received more than 8%.

*Seven percent of the students did not know the family income, and two percent would not reveal the family income.

Perceived disadvantages of the university

At the same time that students were asked about the advantages of each institutional type, they were also asked about the disadvantages. The group viewed the major disadvantage of the university as being "too big," (43 percent) followed by "less personal attention" (34 percent), and "impersonal" (27 percent), "classes too large" (23 percent), and "cannot get to know anyone as well" (19 percent). All of these perceived disadvantages are a function of the university's size, which is apparently so overwhelming to the students that very few other disadvantages received more than a couple of percentage points.

Disadvantages of the university?

	Total Student Sample	First Choice is: Private College	First Choice is: University
School is too big	43%	40%	44%
Less personal attention	34	40	32
Impersonal	27	34	24
Classes too large	23	25	22
Cannot get to know anyone as well	19	25	13
BASE FOR PERCENTAGES	(334)	(106)	(132)

* NOTE: Other disadvantages were given, but none received more than 9 % response.

The university-bound student group appears to be consistently less concerned than the private college group about less personal attention, an impersonal nature, and difficulty in getting to know others.

Why is a private liberal arts college your first choice?

Like the university-bound students, those selecting a private college (106 in all) most frequently cited the availability of courses as a reason (45 percent). But while the university group listed cost as the next reason, private college students listed quality of education and friendly people or atmosphere as second and third, with cost being one of the least mentioned reasons, and there is also greater emphasis on a close student-teacher ratio (9 percent *vs.* 2 percent for the university), and good teachers (16 percent *vs.* 5 percent for the university). The fourth most frequent response was "smallness," followed by the religious background of the college. Across all types, students gave little mention to "good job placement following graduation." Evidently, vocationalism is not a burning issue with the college-bound high school senior.

Advantages of private colleges?

	Total Student Sample
Have courses I am interested in/they have a good . . . Department/Program	45%
Quality of the education — good academically/one of the best	25
Friendly/friendly people/atmosphere	22
Small/not too big	21
Has religion/is a church college	18
Has a good reputation/scholastic reputation/good name/prestige	17
Good teachers/faculty	16
(Base for percentages)	(106)

Perceived disadvantages of private colleges

The major disadvantage of the private college is perceived to be "high tuition/too expensive" (69 percent). Two other disadvantages received moderate notice: "You can get isolated or sheltered there" (15 percent) and limited curriculum (11 percent). Few other reasons were cited.

Disadvantages of private college?

	Total Student Sample	First Choice is Private College	First Choice is University
High tuition/too expensive	69%	75%	69%
You can get isolated or sheltered there	15	20	11
Limited curriculum	11	10	14
(Base for percentages)	(334)	(106)	(132)

* NOTE: Other disadvantages were given, but none received more than 9% response.

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Conclusions

The research findings provided for the development of a media campaign with the following characteristics:

1. *The target population* for the advertisements was qualified (i.e. to include those juniors and seniors in high school ranking in the upper third of their class who do not consider attending any private liberal arts college). This target group represents 45% of the upper third student population. Parents of the above group are considered to be an important secondary target group.

2. *The mission of the campaign* was defined as being to increase the number of students who *consider* applying to one or more private colleges.

3. It was agreed that *the campaign message* should assume that students already know about the quality of learning opportunities at private colleges. The message should underscore the "smallness" of the colleges and suggest the potential benefits of a liberal arts education when considering graduate school admissions or succeeding in a vocation. **Finally, the campaign message should appeal to the intellect by asking the student to take a closer look at private colleges and the availability of financial aid, rather than assuming that an education at a private liberal arts college cannot be afforded.**

Drake University
Des Moines, Iowa

4 Chapter

A Program to Improve Freshman-Sophomore Retention

Everett E. Hadley, Ph.D.
Ivan J. Fahs, Ph.D., Research Coordinators

Drake University, the largest private university in the upper Northwest eight-state region, is located in Des Moines, Iowa. Since 1968 its full-time equivalent undergraduate enrollment has fluctuated between 4,510 and 4,944, with a total graduate and undergraduate enrollment of over 6,000. The university is comprised of six undergraduate colleges — Liberal Arts, Pharmacy, Business, Fine Arts, Education and Journalism — plus a Graduate School, Law School and a College for Continuing Education. The school has no religious affiliation. The University accepts 80 percent of its applicants, 77 percent of whom actually enroll.

Unlike many private colleges, Drake currently does not have a severe problem with declining enrollment. However, with a view toward the lean days to come, college personnel concluded that the most appropriate measure to be taken by Drake to avoid future difficulties would be to improve the retention rate at the University, particularly with regard to the freshman-sophomore years. Thus, upon the inception of Northwest Area Foundation's Independent College Program in 1973, Drake submitted a grant proposal to the Foundation for an admissions and retention project at the University. The proposal was accepted and funded for $93,199 in 1973 and was renewed the following year at $96,500.

The Drake University Admissions and Retention Year I Project, implemented during the 1973–74 ademic year, addressed three major objectives: to increase the number of applications; to improve yield; and to improve freshman-sophomore retention. This paper, how ill deal exclusively with the third objective, which received a major proporti time and money allocated to the entire Project. Drake delineated four prima tivities which were undertaken during the year to improve retention, as outlined in Table 1.

Table 1
Project description

OBJECTIVE: To reduce attrition between freshman and sophomore years

MEANS: A. Devise means of early prediction of potential academic difficulties

B. Create team of special faculty advisors for exit-prone students
   1. Train advisors, provide with materials
   2. Establish 24-hour advising hot line

C. Develop efficient exit interview system
   1. Refine flow chart for withdrawals
   2. Train exit interviewers

D. Construct probability tables regarding grade prediction for freshman courses

A method of predicting potential academic difficulties was to be devised and utilized to single out the new freshmen who would be prone to withdraw from the University. These exit-prone students would be assigned to a specially trained team of faculty advisors while the other freshmen would participate in the established advising system. Plans were also made to construct grade prediction probability tables to assist th isors. In addition to the above measures, plans were made to develop an effici xit interview system for those students who did withdraw from Drake.

In order to bet r coordinate all aspects of the retention project, Drake formed the Hill Advisory U it which accepted responsibility for organizing and implementing funded projects related to advising and retention.[1] The retention program subsequently begun by the Unit consisted of four major activities.

[1] The "Hill Advisory Unit" relates to Hill Family Foundation, since re-named the Northwest Area Foundation. The Hill Unit has been under the direction of Dr. Everett E. Hadley, Special Assistant to the Vice President for Academic Affairs at Drake University, since its inception.

First, Drake devised a means of predicting which students would be prone to exit and/or probably experience academic difficulties. By utilizing SAT/ACT profile information, Drake was able to identify eight variables characteristic of withdrawing students as opposed to persisting students:

- did not participate in high school honors programs,
- did not desire to participate in a University honors program,
- desired help in mathematics,
- had an ACT composite ≤ 19,
- did not desire help to find work (a job),
- did not seek financial aid,
- did not desire to participate in a religious group, and
- planned to have a car on campus.

This information, combined with scores on a retention index device and the results obtained from available grade point average prediction formulas, served as a basis for the selection of 283 exit-prone students in the fall 1973 freshman class of 895.

The two-year experiment

Can a school with a relatively high attrition rate effect a positive change by encouraging faculty/student interaction? If faculty members are trained to be more effective advisors, will this influence the enrollment departure decisions of students?

The interactive techniques utilized in faculty advising, counseling and orientation activities suggest that a research strategy based on a high level of faculty/student interaction may be a promising method of reducing student attrition.

Experiment I (First year)

Method. A team of 16 faculty members, representing each of the six undergraduate colleges, was selected by their respective college deans to participate in this program. Each team faculty member participated in a weekly one-hour training session for the first semester. The second semester training sessions consisted of case studies in a biweekly class. Each Project faculty member was required to meet with his advisees during the first week of classes and regularly in a two-week sequence thereafter.

Subjects. A total of 300 students, classified as "exit-prone," was identified before matriculation in the fall of 1973. These students were identified on the basis of low rank in high school class, low test scores, or low scores on a device reputed to identify non-persisting students. A cohort group from the other 600 freshmen matriculating at this time was also identified. Although matching on the basis of ability was not possible, students were controlled on the basis of sex, college of enrollment, and lack of previous college experience.

Procedure. The advisors of the 300 exit-prone students agreed to meet with their advisees regularly. These advisors were provided with training in interviewing, program-planning, use of University resources for students, information relating to the probability of student success in a given course, exit interview training, and interpretation of test information. Control students saw advisors on a schedule of their own devising.

Experiment 2 (Second year)

Method. The team of advisors handling the experimental sections in this phase was increased to 27 from the six undergraduate colleges. This reduced the number of advisees per advisor from 18/1 to 11/1. The training routine was similar to that described in Experiment 1.

Subjects. A cross-sectional design was instituted for this program. Students were selected through use of a stratified sampling technique with each student in the experimental group matched with a control student on the basis of ability as well as college of enrollment, sex, and lack of previous college experience.

Results. "How many times did you meet with your advisor?" Students living in dormitories were asked this question just prior to the December holidays in both years of the Project. As shown in Table 2, the experimental group had the benefit of a higher number of contacts with their advisors than did those in the control group. In both experiments the difference is significant and may actually be underestimated since no contacts greater than seven years were included.

Table 2

*Summary of advising contacts between freshmen resident students and their faculty advisors***

Project Segment	Group	N	No. of Contacts	Mean
Experiment 1	Experimental	264	948	4.6*
	Control	626	1688	2.7
Experiment 2	Experimental	78***	406	5.2*
	Control	77***	145	1.9

* Difference significant at the .05% level.
** Data gathered in December of each year.
*** Sample taken from total group.

An analysis of those students who withdrew while a term was still in session, or who failed to return for the semester immediately following (excluding summer school), is displayed in Table 3.

Table 3

Attrition summary for freshmen students taken at key points during the academic year

Project Segment	Group	N	Fall WithD.	Spring Non-R	Spring WithD.	9 Mos. Total	Summer Losses	12 Months Total
Experiment 1	Experimental	284	13	12	5	30*	55	85
	Control	626	26	58	22	106*	26	132
						136	81	=217
Experiment 2	Experimental	286	6	10	5	21	35	56*
	Control	268	5	17	0	22	51	73*
	Cohort	346	26	7	9	42	53	95
						85	139	=224

*Differences significant at the .05% level

In Experiment 1 the students in the experimental group (exit-prone) tended to sustain enrollment while the academic year was in progress. (As a matter of fact, the difference between the two groups at the end of May in year one was significant.) In Experiment 2, differences between the experimental and control groups for the same period are not major during the academic year. However, **a significantly higher number of students from the experimental group returned for the sophomore year.** The "cohort" category is included in Table 3 to provide comparative data on the total withdrawal and non-returnee data for the two years in question.

Were students in the experimental group more satisfied with the advising which they received? An examination of Table 4 suggests an affirmative response. A sample of each group for both years of the experiment was asked to respond to an inquiry routine of 17 items which was referred to locally as the "Advisor Perception Inventory".

Table 4

Advisee satisfaction summary based upon significant differences from a 17-item inquiry routine

Project Segment	Group	N	Items Significantly Favorable		
			First Admin.	N	Second Admin.
Experiment 1	Experimental	181	15*	105	7*
	Control	100	0	65	0
Experiment 2	Experimental	173	14*	19	0
	Control	120	0	26	0

* Difference significant at the .05% level.

The content of the API is fairly straightforward, with such questions as: "My advisor has been readily available for consultation; My advisor has been well-prepared for each meeting; and My advisor has been actively helpful and has been genuinely concerned about my welfare". The number of these items favoring the experimental advisors is impressive.

Discussion. When a student is satisfied with the quality of advising which he has received, does this appear to have an effect upon his enrollment decisions? Experiment 1 suggests that the answer is "yes" for exit-prone students during the academic year. When the same treatment is applied to a cross section of students (Experiment 2) the answer appears to be "no" during the school year but "yes" upon the enrollment for the sophomore year. Early indications are that the long-range effects may be negligible, but further study will be required to identify re-enrollment patterns for those students who have been the recipients of varied advising procedures.

An additional sidelight is illustrated by examining the GPAs of Hill exit-prone students and other freshmen. Both groups of freshmen were divided according to college and sex. In every case, the *predicted* GPAs of the exit-prone students were lower than those of the other freshmen, as expected. However, after fall semester of 1973, the GPAs obtained by men in four of the six colleges and by women in two of the six were comparable to the GPAs obtained by other freshmen. The average GPAs of the exit-prone students was 2.98, as compared to an average of 3.07 for other freshmen. This indicates that, **in some cases, the improved advising of the Hill exit-prone students perhaps stimulated them to perform above expectations.**

The third measure taken by Drake to improve retention was to refine the exit interview and withdrawal system. A flow chart illustrating procedures for withdrawing from Drake was developed and made available for interested students and faculty members. Also, a close examination of needed or helpful information obtainable from withdrawing students resulted in the development of an exit interview form, which was administered to each student leaving Drake in conjunction with an interview conducted by a trained counselor. Subsequent to the student's exit, a letter was sent to the former student expressing concern, along with a re-admission reply card. Four of the 130 students who received such letters re-enrolled in fall 1974.

Fourth, Drake developed a series of grade prediction matrices to enable faculty advisors to better counsel their advisees in academic matters. Each freshman course had its own matrix illustrating the probable grades that would be received by students in that class according to their composite ACT scores and high school GPAs. An example is provided in Figure (I). These matrices were developed during the summer of 1974 and utilized the following school year, particularly in the spring of 1975. Both faculty members as a whole and the faculty advisors expressed reservation regarding the use of the matrices — feeling that certain classes or faculty might be "officially" stereotyped and that opportunities for challenging experiences might be limited for students. However, the matrices were kept confidential and were used primarily to caution a student against registering for several courses simultaneously in which he has a very low probability for success. Faculty reaction to this use of the matrices was very favorable.

Figure (I)

Chances in 100
of obtaining a "C" or higher in ____

	HIGH SCHOOL GPA C	B	A
30 and above			99 (100)
25 — 29		92 (100)	97 (100)
20 — 24	63 (91)	75 (84)	89 (100)
16 — 19	43 (58)	58 (92)	
15 and below	29 (55)		

Observed frequencies are expressed in parentheses. Cells containing less than five observations were not reported.

If no information is available on the student, chances of getting a "C" or higher are 76 out of 100.

The expected withdrawal rate from this course is 15%. The typical withdrawee had an ACT composite score of 22 and a "B" high school GPA.

The purpose of these four activities was to improve retention at Drake — specifically freshman-to-sophomore retention. This objective was accomplished, as indicated in Table 5. **The retention rate for fall 1973 freshmen who returned as sophomores in fall of 1974 was 76 percent, significantly higher than that of the previous five years.**[2]

[2] Drake reported at .05.

Table 5

Freshman-sophomore retention at Drake

	Number of Freshmen	*Number Returning as Sophomores*	*Retention Rate*
1968 Freshmen	1157	707	62%
1969 Freshmen	1133	832	73%
1970 Freshmen	1185	856	[illegible]2%
1971 Freshmen	1252	897	72%
1972 Freshmen	1062	729	69%
197[illegible] Freshmen	895	678	76%
1974 Freshmen	900	676	75%

Several other items not specifically noted in Drake's project proposal were achieved in the process of carrying out the proposed activities. The Hill Advisory Unit developed an extensive bibliography on academic advising and retention, for example, and surveyed other Iowa colleges regarding retention practices and concerns. A retention newsletter, "Retain," was developed and printed for distribution to interested [illegible] and persons on a quarterly basis. The newsletter contains relevant information [illegible] as admissions and retention conference reviews, article reviews and descrip[illegible] practices undertaken by other colleges to improve their retention. The Drake [illegible] Unit also sponsored and hosted two retention conferences during the 1973-74 Project year and two more in the spring of 1975, which were attended by other colleges in the area. Attendance ranged from 42 people from 29 institutions to 83 people from 35 institutions. The conferences served primarily as a forum for the discussion of problems, methods and ideas for improving retention.

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St. John's University
Collegeville, Minnesota

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Chapter

A Study of Attrition

James Dechaine, Ph.D.
Ivan J. Fahs, Ph.D., Research Coordinators

St. John's University is a liberal arts university for men located 80 miles northwest of Minneapolis, Minnesota. Sponsored by the Benedictines of St. John's Abbey, the University is closely linked with the neighboring College of St. Benedict through an extensive cooperative education program.

St. John's has experienced annual enrollment increases since 1968, and fall enrollment statistics in 1974 reached a peak of 1,830 full-time equivalent students. The attrition of these enrolled students, however, has flu ated. By the end of the 1972-73 school year, one out of every five freshmen was withdrawing from St. John's — an increase of 8 percent over the previous year. Disturbed by what appeared to be a trend toward even greater attrition, St. John's approached the Northwest Area Foundation with a proposal for a program that would enable the University to investigate the causes of attrition and to search for solutions to this common problem during the 1973-74 academic year.

The St. John's admissions staff began to investigate their attrition problem by identifying exit-prone freshmen; then they asked all on-campus agencies to visit with each student who indicated that he might discontinue his studies

I however, a series of interviews indicated that St. John's needed more information regarding why students leave. A questionnaire was developed and distributed to freshmen and sophomores who had not returned to St. John's in the fall of 1973. Nearly 80 percent of the freshmen and 50 percent of the sophomores responded to the questionnaires. A summary of their reasons for leaving is shown in Table 1.

Table 1

Summary of responses given for leaving St. John's

REASON FOR LEAVING	FRESHMEN		SOPHOMORES	
	N	%	N	%
Financial aid was insufficient	22	20	18	25
Undecided about major	16	15	6	7
Emotional or personal problems	13	12	8	11
Limited social opportunities	11	10	8	11
Dissatisfied with available courses of study	9	8	5	4
Pre-professional program — had to transfer	8	7	7	8
Not interested in college	7	6	4	5
Rural location	7	6	3	4
Academically too difficult	5	5	0	0
Other Reason, not specified	12	11	17	23
TOTAL	110	100%	73	100%

Total number of responses given exceed number of students responding as some students listed multiple reasons for their withdrawal.

Although insufficient financial aid was the most frequently mentioned reason for leaving, it really appeared as the only reason. Often "insufficient financial aid" was coupled with "undecided about major" and/or with "dissatisfaction with available courses of study." Sophomore and freshman responses were remarkably similar with the exception that sophomores appear to be more sure of their academic programs. Sophomores expressed a wider variety of reasons for leaving, often elaborating on them.

Students were urged to expand upon their reasons for leaving St. John's in this manner in the hope that they would search more deeply into their decisions. Their comments fell into three categories: financial difficulties, unsatisfactory social or cultural life, and indecision concerning academic plans and vocational choice. For example, one ex-student noted that, "*St. John's is very academically oriented, but the social orientation is superficial. With only 2,000 people at St. John's, the degree of difference in individuals is small.*" Another ex-Johnny remarked that "*in order to be able to* *attend last year, I had to take out a large loan, and I didn't think that I could afford to take another large one for this year.*" Another candidly described his first year at SJU as "*a lot of fun and that's all. I was just wasting my time and yours. I loved the school, but I'm too undecided as to what I want to do with myself. I wasn't ready to get down to work.*"

Despite the fact that 15 percent of the freshmen left St. John's because they were undecided about a major, **70 percent of the freshman questionnaire respondents and 65 percent of the sophomore respondents who left St. John's have continued their education at another school. However, nearly three-fourths of these students transferred to public institutions** — a fact consistent with the most common reason for leaving — which was insufficient financial aid (see Table 1).

Another apparent factor affecting St. John's attrition rate was the emergence of a number of students who enrolled with the thought of remaining for only one to two years. Some indicated that they were enrolled in a pre-professional program and planned to transfer after one, two or three years. Others indicated that they preferred to study for one year in a small school to get settled before transferring to another school. In fact, 27 percent of the freshmen and sophomores who left indicated that they had planned to attend SJU for two years or less.

Comparisons of students who withdrew with those who persisted

Following the interviews and questionnaire surveys, the St. John's staff began to question whether the students who withdrew were different from those who persisted. Perhaps their family income was smaller and this affected their decision, or perhaps they did not receive as much financial aid as those who persisted. In order to make these comparisons, SJU personnel chose the previous year's freshman class for the analysis. The students who withdrew from this class and those who persisted were compared using the following eight variables:

- type of high school attended
- geographic location of student's home town
- size of high school graduating class
- family income
- high school rank
- ACT composite score
- total financial aid award
- college GPA

The results indicated few differences between those students who withdrew and those who persisted. The type of high school attended, the geographic origin, the size of the graduating class, and the level of family income were not related to student attrition. However, high school rank, ACT composite score, financial aid, and college GPA did turn up some slight differences between those who withdrew and those who persisted.

Several studies have shown that students with less academic ability are more likely to leave school, and the findings at SJU tend to substantiate this conclusion. Table 2 compares the high school rank of those who persisted with the rank of those who withdrew.

Table 2

Comparison of high school rank

Rank	*Persisted*	*Withdrew*
90-100	26%	16%
75-89	31	27
50-74	[illegible]	25
49 and below	12	24
NA	3	5
	100% (n = 383)	100% (n = 8[illegible])

Fifty-seven percent of those who persisted at SJU were in the top 25 percent of their high school graduating class as compared with 45 percent of those who withdrew.

Similarly, an analysis of ACT test scores indicates some difference between those who left and those who stayed. Forty-two percent of those who persisted scored 25 or above on the ACT test, compared to 38 percent of those who withdrew.

Table 3

ACT composite

Score Intervals	*Persisted*	*Withdrew*
30-36	7%	4%
25-29	35	34
21-24	20	21
17-20	8	13
Under 16	2	3
NA	28	25
	100% (n = 383)	100% (n = 86)

Table 4 compares the two groups of students relative to financial aid awards received. As might be expected, students with higher awards are more likely to stay in school; however, it should be noted that students with large grants are also, in many cases, highly talented academically.

Table 4

Financial aid award

Total Aid Awarded	*Persisted*	*Withdrew*
$2,000+	32%	20%
$1,501-1,999	23	24
$1,001-1,500	10	26
$501-1,000	8	13
$0-500	8	7
NA or none	19	10
	100% (n = 383)	100% (n = 86)

Thus, 55 percent of those who persisted were receiving over $1500 in financial aid, whereas only 44 percent of those who withdrew received that amount.

Finally, Table 5 indicates that students withdrawing are not as academically successful in college as those persisting in school.

Table 5

College GPA

GPA	*Persisted*	*Withdrew*
3.51-4.00	11%	4%
3.01-3.50	25	12
2.51-3.00	33	24
2.01-2.50	23	22
Below 2.00	8	38
	100% (n = 383)	100% (n = 86)

Thus, 38 percent of those who withdrew had less than a C average (bel-

The results of these comparisons did not seem to shed any new light on why some students stay at St. John's, while others leave. **The problem of attrition remained complex, and no one variable seemed to be accountable.**

Review of academic advisory program

One of the questions asked of students who had withdrawn from SJU was: If you had an academic or personal problem as a freshman, to whom did you go for help? The findings indicated that **the relationships students develop with faculty and other students are an important factor in retaining students.** St. John's staff therefore decided to explore its advising program in more detail.

Table 6 lists the source of assistance that students sought when they had a personal or academic problem.

Table 6

Where students go for help

Source of Assistance	*Freshmen*		*Sophomores*	
	Type of Problem			
	Academic	*Personal*	*Academic*	*Personal*
Fellow student	32%	45%	25%	38%
Member of faculty				
other than advisor	20	6	9	14
Head resident	11	9	18	9
Faculty advisor	10	9	19	9
Faculty resident	12	21	10	21
Counseling office	12	6	12	7
Other	2	6	7	0
	100%	100%	100%	100%
	(n = 96)	(n = 65)	(n = 57)	(n = 42)

Several students listed multiple sources of help, while others stated they had no problems or did not respond to the question.

Table 6 presents some interesting comparisons. **Fellow students, including head residents, account for nearly 50 percent of student choices for help.** The Counseling Office, as far as these students were concerned, is involved more in academic counseling than personal counseling. Dorm counseling appears to be a popular source of assistance. Nearly 30 percent of the students who left (freshmen and sophomores) selected either the faculty resident or the head resident as one source of assistance. Only 10 percent of sampled freshmen sought academic assistance from their faculty advisors; however, 19 percent of sophomores consulted their advisors for help.

St. John's had for many years relied on the traditional method of advising students — arbitrarily assigning a number of students to each member of the teaching faculty. This practice had been severely criticized both by the students and the faculty. In order to learn more about the student-faculty advisory system, a Faculty Advisor Questionnaire was developed and distributed to all members of the St. John's faculty then currently serving as faculty advisors. The responses to this Faculty Advisory Questionnaire indicated the following conclusions:

- Faculty members (59 percent) enjoy advising students and are concerned with the mechanics of the process. Of the 74 percent of the faculty who returned the questionnaire, three-fourths of them took the time to make additional comments and recommendations.
- The number of students assigned to each advisor is very unevenly distributed — from two to 65.
- Although most faculty advisors have seen all or nearly all of their advisees, they spend relatively little time in this task. **Seventy-five percent of the advisors spend less than five hours per week with their advisees.**

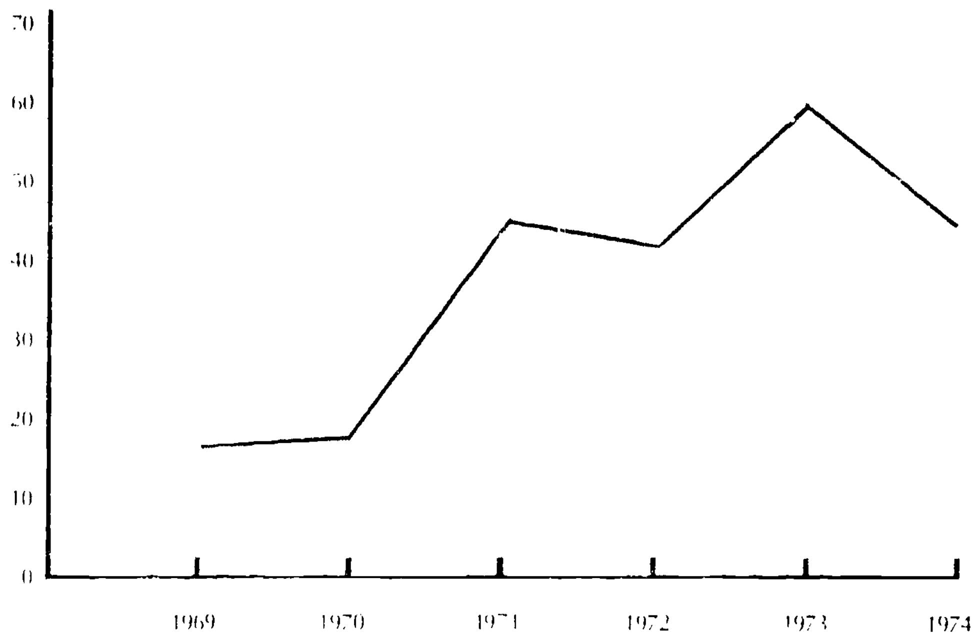
The results of this faculty survey, together with student comments (from the attrition questionnaire and through personal interviews), confirmed SJU staff's suspicions that the present freshman advising program was in need of attention.

Study of readmitted students

A serendipitous effect of the research conducted at St. John's was the discovery that as attrition has increased, so has the number of readmitted students. Figure 1 illustrates the sharp increase in the number of readmitted students since 1969.[1]

Figure 1

Readmitted students at St. John's University



Because the number of readmitted students had substantially increased, SJU personnel thought it important to know more about their reasons for leaving and how this experience away from campus affected them. A readmitted student questionnaire was therefore developed for this purpose and mailed to 61 former students. Forty-five, or 74 percent, of the students responded to the questionnaire.

St. John's staff discovered that most students who interrupt their studies are away a relatively short period of time; over one-half were absent for only one semester and another 30 percent for two to three semesters, for example.

Table 7 indicates that many students who interrupt their education do so for two reasons, they want a break from school and/or they are unsure of their program or major.

Table 7

Reasons given for leaving St. John's

Needed a break from school classes	49%
Uncertainty with regard to major field	24
Other	11
Difficulty in financing education	9
Personal problem	7
	100% (n = 45)

[1] The number of students readmitted is as follows

1969-70	18	1972-73	41
1970-71	19	1973-74	61
1971-72	44	1974-75	46

These two observations are further documented by the fact that nearly 80 percent of the readmitted students indicated they had either worked, traveled or done both during their absence from St. John's. The remaining 20 percent enrolled in another institution.

The fact that less than 10% of the returning students described "lack of sufficient finances" as a reason for leaving St. John's is surprising, in light of the fact that this was the item cited most often as a reason for leaving by students who withdrew (see Table 1). Perhaps this suggests that the students who withdraw for financial reasons do not return, whereas those who withdraw and do return usually withdrew for other reasons.

Most of the students who returned felt that their absence from St. John's was helpful to them. Thirty-eight percent felt that the absence helped them "very much" in deciding on a vocational choice, while 44 percent felt it helped "somewhat."

Several students remarked that their absence from St. John's had a maturing effect on their personality. SJU staff speculated that perhaps the rural, secluded atmosphere of St. John's influences some students to leave school for a year or so, renew their contact with the "real world" and then return to their academic work. The replacement of the draft by a voluntary service has also no doubt increased the trend toward non-continuous education — especially at men's schools like St. John's.

Conclusions

Most of the students who leave the St. John's campus simply do not return. Although the University still cannot succinctly state why these students leave, the research has turned up several clues. **As a result of that research, three major recommendations were implemented at St. John's:**

- The research indicated that some students leave because they are unsure of their vocational goals; thus, the career education and counseling services were expanded at St. John's through the assistance of a half-time person.
- St. John's noticed that as attrition appears to be increasing at the University, so does the number of readmitted students. Their decision to return to St. John's depends, in part, on the types of feelings they had about the school when they left. Thus, a central agency was established to work with students who are thinking of discontinuing or interrupting their studies.
- The questionnaire sent to students who had withdrawn indicated that the most common source of assistance when they needed help was from other students. For this reason, effective in fall 1974-75, St. John's introduced a peer counseling program for freshmen under the supervision of the Freshman Dean.

Gustavus Adolphus College
St. Peter, Minnesota

6

Chapter

Advising and Counseling to Improve Retention

Paul Tillquist, Ph.D.

Gustavus Adolphus College is a coeducational liberal arts college located 65 miles southwest of Minneapolis, Minnesota. It is one of the oldest educational institutions in the state, has strong Swedish ethnic ties, and is supported by the Lutheran Church of America.

Gustavus has experienced annual enrollment increases since 1962 and in the fall of 1975 had its highest enrollment in history, with 2,070 full-time equivalent students. In 1975 the college accepted 92 percent of its applicants, of whom 69 percent accepted an offer of admission. Unlike many private colleges, Gustavus currently does not have a severe problem with declining enrollment. However, the budget of the college is tightly correlated with the number of full-time equivalent students. In the absence of a predictable entering enrollment from year to year, the college has been unable to adopt a final operating budget until after the opening of the school year.

After the announcement of Northwest Area Foundation's Independent College Program in 1973, Gustavus therefore submitted a proposal to the Foundation for an admissions and retention project. The proposed project was accepted and funded for $83,889 in 1973 and was renewed the following year for $48,250.

Rationale for the proposal

There are many factors which influence a student's decision to withdraw from an undergraduate program. At a reasonably selective institution like Gustavus, poor academic achievement should not be a significant factor. With some exceptions, **the typical Gustavus freshman or sophomore who decides not to return does so because he has no sense of purpose in his education, or has not been able to identify with the College community, or has developed a professional goal which he thinks Gustavus is incapable of helping him achieve.**

To deal with these broad areas of disaffection, the retention program was designed to improve academic advising and career counseling. It was felt that such a program could significantly improve enrollment retention, particularly during the first two years of the undergraduate cycle.

Project year I, 1973–74

The Gustavus Adolphus College Admissions and Retention Project implemented during the 1973–74 academic year had one major objective: to begin organizing a program which would increase the retention rate from 83 percent to 87 percent. There were four primary activities undertaken during the year to improve retention, as outlined in Table 1.

Table 1

Objectives and means, Project Year I

OBJECTIVE: To increase retention rate from 83% to 87%

MEANS: Career counseling and academic advising

1. Forty faculty to be chosen and assigned 15 advisees each
   a. three-day orientation to academic programs
   b. advisors meet with advisees at regular intervals
2. Thirty-two seniors to be chosen to be assistants to faculty advisors
   a. advise students on same floor in residence halls
   b. meet regularly with faculty advisors for coordinated program
3. Director of Academic Advising and Career Counseling to be chosen
4. Special programs for upper 10% and lower 10% of freshman class
   a. 10% freshmen with highest academic promise meet eight times for special programs and seminars
   b. 10% freshmen with lowest academic promise meet regularly for supportive discussions and academic help

As can be seen, the plan called for special attention to freshmen and for focus on advising groups located in residence halls. (The college is 95 percent residential.)

Thirty-two upperclassmen (Collegiate Fellows) and faculty members were therefore chosen to form a team for the purpose of academic advising. The team was to be assigned 15 freshmen advisees each. The advising group was to be located on each floor or in each section of the College residence halls.

One of the most important tasks accomplished during the planning stage was to agree, as faculty advisors and Collegiate Fellows, on what should comprise an advising program. During a three-day spring training and orientation session, faculty advisors and Collegiate Fellows discussed the basic elements of an academic advising program. Through this process, four basic assumptions emerged. The following statement was then adopted by the freshmen advisors and the Collegiate Fellows.

The basic elements of an academic advising program are:

1) Accurate information about academic possibilities, campus programs and resource people.

2) An individualized, trusting relationship between advisor and advisee.

3) An open-minded approach to academic options, reflecting a recognition that the social, cultural and academic spheres are interrelated.

4) An advising program that seeks to encourage and foster intellectual curiosity and growth, but recognizes that ultimate decisions are the choice and responsibility of the advisee.

5) *Summarily*, a program whose purpose is the good of the person. We hope through working towards this goal to strengthen the community.

In the Fall of 1974, the Collegiate Fellows met for a one-week training program. The training program focused on the areas of communications skills, intercultural relations, first aid training, mental health emergency procedures and study skills.

The team, consisting of the Collegiate Fellow and freshman advisors, met with freshmen groups the first time in small group meetings during a two-day orientation period. Research done at Gustavus during 1966–68 with two freshmen classes and American Council on Education (ACE) research data from recent freshmen classes at Gustavus had indicated that students come to the campus with high academic expectations. The orientation program was therefore designed to build on those expectations. **Collegiate Fellows and advisors are responsible for helping new students quickly identify with the college community.** Group meetings during orientation strive to weave the student into the fabric of the academic community as quickly as possible. The Collegiate Fellow is also usually the first person to identify the potential drop-out or the student considering withdrawal.

To provide Collegiate Fellows and freshmen advisors with information so that they could answer students' questions about academic options, an advising manual was also designed in 1974. This manual lists specific information about majors, career choices relating to majors, and descriptions of various academic options available to students. In addition, a monthly newsletter to Collegiate Fellows and advisors, "Advising Notes", provided such information as deadlines for registration for graduate school examinations, new academic programs, and information concerning registration procedures.

There was a strong emphasis on providing information for the advisor to assist the student in moving toward a purpose in his/her education. The goal was to provide a student with the right information at the right time, thus giving him a sense of purpose and hopefully preventing a drop-out.

Special programs for the upper 10 percent and lower 10 percent of the freshmen class did not work as well as planned, however. The Dean's Seminar, made up of students with high academic predictors, met only twice, and the student response to the seminar format was negative. Students indicated a desire to become involved in an in-depth program rather than a short seminar. This aspect of the program was therefore redesigned in 1974 by incorporating it into an Honors Program for freshmen. In the fall of 1974, 45 freshmen with high academic predictors were invited to attend an honors retreat. During this retreat, the Honors Program was discussed. Students were then invited to participate in a continuing Honors Seminar held during the fall and spring semesters and encouraged to enroll in special honors sections or encouraged to request of instructors an opportunity to do honors work in classes. In the fall of 1975, 90 freshmen students expressed a desire to become involved in the Honors Program. Many will participate in a special Honors Seminar and will also enroll in honors sections and do honors work in classes.

The 10 percent of the freshmen class with the lowest academic predictors met five times during the first year. These group meetings were also discontinued because students had negative feelings about being identified as a "problem" group. During the last four semesters, grades of students with low academic predictors were therefore carefully monitored at mid-term and semester grading times. Students needing additional support were contacted by the academic advising or counseling offices.

Generally, the goals and objectives of the first year were met. In fact, one might say that the goals were met too well. The retention rate increased from 83 percent to 87.5 percent for the fall of 1974. **The goal was surpassed the first year of the program when some of the aspects of the program were not fully implemented.** Perhaps a Hawthorne effect or other phenomena explain this situation. Needless to say, the college administration was pleased with the increase in retention.

Project Year II, 1974–75

Gustavus' Year II Project was essentially a continuation and expansion of the first year Project. The academic advising program (including both Collegiate Fellows and faculty advisors) was extended to upperclassmen. The objectives and means for Project Year II follow.

Table 2

Objectives and means, Project year II

OBJECTIVE: Increase student retention

MEANS: Expand academic advisory project of Year I to upperclassmen
Increase number of Collegiate Fellows and faculty advisors from 31 to 50
Restructure career counseling seminars

1. Faculty
   a. personnel exchange with business
   b. seminars with business leaders
   c. information regarding job market
   d. two summer business experiences
2. Students
   a. ACT analysis with prospects and new enrollees
   b. Collegiate Fellows — group meetings regarding careers
   c. increased internship opportunities
   d. workshops regarding changing occupational patterns for sophomores and juniors
   e. workshops regarding the selection of a job — for seniors
   f. increased summer employment opportunities
   g. coordinated career counseling activities by all offices
   h. increased agencies' interviews on campus (from 24 to 48)
   i. senior visits to businesses
   j. "Career Observation" course in January in Twin Cities
3. Business
   a. Business Advisory Board established to assist college regarding business seminars and needs
   b. contracts with alumni in business/government
   c. business leaders' seminars/courses on campus

The academic advisory program of Year I was expanded to upperclassmen by increasing the number of Collegiate Fellows and faculty advisors to 50. They continued providing accurate information to students about academic options. The advising manual was also updated, and the advising notes were sent to all Collegiate Fellows and faculty advisors to keep them apprised of new academic options.

The Collegiate Fellow Program continued to have a broad impact on the entire campus environment as well. The core of the retention program, it is considered one of the major contributors to the increase in retention for freshmen. Collegiate Fellows, with information provided through the advising manual and the advising notes publication, are able to answer many questions which freshmen raise about options for academic majors, the relationship of a major to careers, and questions about one's purposes in college. In cases where Collegiate Fellows are unable to answer questions, referrals were made to faculty advisors or to appropriate student service offices.

An additional emphasis of Project Year II centered on career counseling. Although career counseling was hinted at in the objectives for Project Year I, it was the part of the program most difficult to develop. During Project Year I, discussions by faculty, career counseling staff, other administrators, and students resulted in a multi-dimensional program of career services.

A first objective was to coordinate the career counseling activities of offices already functioning in that area. Meetings were held with representatives of the Counseling Center, Career Counseling, Placement and Academic Advising Offices. This cooperative effort resulted in the development of a Career Resource Center. The Resource Center is located adjacent to the Career Counseling, Placement, and Cooperative Education Offices, and contains catalogs of graduate schools, pamphlets and materials dealing with careers, and a variety of other directories and information.

Another emphasis of the career counseling effort was to increase the number of student internship opportunities. A cooperative education program was begun with funding from the Title Four Program of the Federal Government. Contact was made with approximately 4,000 alumni in the United States to determine their interest in supervising an intern in their agency or business either during an interim or semester term. Alumni received a letter, and the results were encouraging. Over 75 internship possibilities were available to students beginning in January of 1976 as a result.

Implications of the project

As a result of two years of close attention to attrition and program efforts, retention statistics for the fall of 1975 indicate the highest retention in the history of Gustavus Adolphus College for a freshman class. At the end of fall registration, 88.5 percent of the freshmen class who were enrolled in the spring of 1975 also enrolled for the fall term of 1975.

What has been most significant in the development of strategies to deal with attrition has been the pervading philosophy that it is important to retain students; that is, it is thought that good retention feeds itself. Students knowing that other students are anxious to return establishes a sense of pride in the institution. From that attitude have developed other components important to retention, all of which now comprise what is referred to as an Attrition Management Program. With an emphasis on retention being shown by the leaders of the Northwest Area Foundation project, **other components of the College have seen fit to redesign some of their programs so as to make a contribution to the retention of students.** Some of those additional components tangential to the original project strategies include:

1) *Redesigning registration procedures.* Registration procedures, including a timetable for registration, have been changed so that a student completes a fall schedule prior to his departure for summer vacation. The Registrar has spent many

hours training staff to be more responsive to the needs of students and to minimize the number of registration problems which might plague a student. He has developed a philosophy of respect and concern for students and has trained the four members of his staff to reflect that concern.

2) *Admissions office.* The admissions process emphasizes individual counseling with students. Materials provided in the advising manual assist admissions personnel in providing better academic advising to students during pre-admissions counseling. Academic advising and initial career counseling begin with the admissions staff. Admissions staff coordinate the spring and summer pre-registration of freshmen, for example. They are also responsible for publishing a catalog, view book, and other brochures to help students gain a better understanding of the College.

3) *Head residents.* Faculty and administrators who work in the residence halls on an overload basis are very interested in the Collegiate Fellow program. Head residents participate in the week-long training seminar held for Collegiate Fellows. By participating in these workshops, they are able to gain a better understanding of the entire retention effort. A change in policy in the Housing Office resulted in students completing housing assignments in the spring rather than fall. A student's initial inclination to return in the fall is reinforced by both housing and registration assignments in the spring. Financial aid awards are also known to students in the spring rather then waiting until the end of the summer. Collegiate Fellows and head residents have teamed to make the residence halls desirable places to live. **On a campus that is almost totally residential, increase in retention is at least partially related to improvements in the residence hall environment.**

4) *Exit interview procedure.* As reported in the Drake University experience, the procedures whereby students withdraw from the college must be highly structured. At Gustavus, a withdrawal procedure has been developed so as to provide data about students who withdraw. Sufficient data has not been collected as yet, but in a year or so reliable information should have been collected describing the student who withdraws. The information may provide clues regarding necessary changes in student services or admissions.

5) *Follow up on non-registrants.* During spring pre-registration, after the deadline for registration has passed, a highly structured operation goes into action headed by the Registrar. The Registrar informs the Associate Dean of the College which students have not registered, and advisors are subsequently informed and encouraged to make personal contact with their advisees. The advisor responds to the Associate Dean with the names and information about the students' plan. A list of students who indicated financial difficulties is prepared for the Director of Financial Aids who then contacts students to check on the possibility of changes in the financial aid package. At the end of May, the Associate Dean and Registrar know the academic plans of every student enrolled during the spring semester. **It is difficult for a student to leave school unregistered for the next semester without someone having made a personal contact with that student to determine his/her academic intentions.**

6) *Leave of absence policy.* **A "stop-out" plan was developed to help students get the most out of their intentions to leave college for a short period of time.** Students intending to stop-out are encouraged to contact the Registrar or Associate Dean and fill out a leave of absence form or draw up a plan which might include independent study. The form is an indication that the student is going to follow a specified plan of action. It is nonbinding in a legal sense, but it is felt that there is a psychological commitment by the individual to the college. Where in the past students dropped out and often never returned, there are preliminary indications that students who fill out the leave of absence form do return to finish their degrees.

7) *Probation program.* A structured program of contacting students about to go on probation was also initiated in 1974. This two-year old program attempts to provide assistance to students in academic difficulty. When mid-semester and semester

grades are issued, the Registrar, Coordinator for Student Services, and Associate Dean of the College meet to determine which students are in the most serious trouble. Names are divided among staff, and personal contact is made with them. Collegiate Fellows and freshman advisors also contact students in their advising groups who may be having difficulty. Efforts are made to provide the students with support and assistance.

8) *Academic referral cards*. The Associate Dean of the College sends a referral card to all faculty members the third week of the semester. They are asked to indicate names of students who are failing to appear for classes or who seem to be having some kind of academic or personal difficulty. These cards are returned to the Associate Dean of the College who then either contacts the student personally or requests that one of the other student services make the contact. This is primarily an early intervention technique and helps to identify students who are in potential difficulty and may drop out.

9) *Quality of and concern for faculty*. Gustavus faculty have become more and more aware of the careful plans made to help retain students. They cooperate extremely well by informing either the Associate Dean of the College or the Registrar when they learn that a student is thinking about leaving. Advisors have also been cooperative when asked to contact a student who has failed to register.

Conclusion

Increases in retention occurring at the same time major reforms are being undertaken seem to indicate a relationship between those changes and retention. **What is most important, at this point, is that efforts at retention are being reflected virtually throughout the entire Gustavus campus.** No one office is solely responsible for the retention program. During the last two years more and more offices and staff members have joined to help a student succeed. Although it might be impossible to cite decisively any one component doing the most to increase retention, the Collegiate Fellow format has clearly contributed the most to the retention program. There is a need, however, for continued research and data gathering to help pin-point other problem areas. Efforts must continually be reviewed and problem areas fixed if retention rates are to *remain* high.