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IN MANY UNIVERSITIES, there is currently a stronger emphasis on research and publications than in the past. At the same time these schools wish to maintain a continuing emphasis on quality teaching. Although the impact of faculty teaching assignments on research output has received little attention at teaching oriented institutions in the past, this is an important consideration, if research effort is to increase. Teaching assignment and research interests can be used to lever each other so that more and better faculty output results.

Teaching assignments are often generated manually by the department chair or designated "scheduler." Schedules are often generated to satisfy current department teaching requirements rather
than to investigate the impact of department planning alternatives. It is often too burdensome to generate teaching assignments for all affected faculty for each of a number of decision or scenario possibilities. Thus, when a department considers adding courses, deleting courses, or modifying program requirements, the impact on teaching assignments is typically not thoroughly investigated.

Because teaching assignments can have an important impact on faculty output, it would be beneficial to investigate the influence of potential changes on the possible assignments for each faculty member. To expedite this investigation, it is necessary to devise a method for generating good teaching assignments easily as part of the planning process. Described here is a decision support system which was developed for this purpose.

THE MODEL BASE

A number of models have been proposed for the faculty assignment problem [1] [2] [3], which employ decision variables that represent the assignment of individual courses to faculty members. In a linear model, this definition of a decision variable requires the implicit assumption that teaching schedule utilities for each faculty member are equal to the sum of the course utilities in the faculty member's schedule. Thus, these formulations ignore the likely effects of interacting course utilities.

In order to incorporate course utility interaction effects into our model, a 0-1 programming formulation has been used, where the decision variables represent the assignment of complete schedules to each faculty member rather than the assignment of individual courses as in the previous models. This requires the generation of teaching schedules external to the model for each faculty member. (Refer to the Appendix for a statement of the model. Also see [4] for an extended discussion of the model characteristics).

THE DECISION PROCESS

The assignment of courses to faculty is a joint decision process with input from the faculty and the department administrator responsible for scheduling. The process is depicted in Figure 1.

Course offerings for a particular semester are determined by department administration with input from department faculty, with consideration given to forecasted demand for various courses, priority of those demands, and availability of faculty resources.
Once course offerings have been tentatively specified for a particular semester, each faculty member is asked to indicate the courses that they wish to consider for inclusion in possible teaching assignments. This subset of courses is used to generate all possible feasible teaching schedules for each faculty member (the required input for the optimization model). The schedules that are generated are feasible in that they do not violate a set of constraints local to each faculty member and determined in advance by the faculty member and scheduler, e.g., maximum and minimum teaching hours, maximum number of different preparations, etc. These constraints may vary from faculty member to faculty member as well as from semester to semester.

The set of feasible teaching schedules is returned to each faculty member who is asked to assign a relative utility on a 0-100 scale for
each teaching schedule (where 100 is assigned to the most desirable schedule). In practice, faculty members have been asked to assign utilities only to their ten most preferred teaching schedules in an attempt to keep the required faculty effort at a reasonable level and to keep model size reasonably small. By restricting the feasible space of the problem in this way, the optimal solution to the problem may not be obtained. However, an upper bound on the optimal solution to the problem can be determined and the feasible space can be expanded, if it is useful to do so. (See [4]).

The list of feasible schedules with their associated utilities for each faculty member and the specification of the number of sections of each course to be taught can now be used as input for the 0-1 programming model. The output of the model is a teaching schedule for each faculty member which maximizes some criterion of interest, e.g., the total schedule utility for all faculty members or maximizes the minimum utility for any faculty member. After review by department administration, the teaching assignments are discussed with the individual faculty members and the final assignments are made.

THE DECISION SUPPORT SYSTEM

Our goal was to implement a system that would generate good faculty teaching assignments via the use of the previously described model. To be useful for planning, the system has to provide a way to easily update or modify the 0-1 programming model associated with the evaluation of numerous scenarios. If the model was to be used on a continuing basis to evaluate a number of scenarios, its use would have to place a reasonably low burden on an administrator, model supervisor (builder and updater), and involved faculty members. This was the set of requirements for the system.

The system that was developed consists of three separate modules. The first module, INIT (Initialize), includes three files (see Figure 2):

1. The first file is a list of names of the faculty who teach in the semester of interest.
2. The second file is a list of course offerings and the associated number of required sections for the semester.
3. The third file is a list of feasible teaching schedules and the associated list of utilities for those schedules for each faculty member.
member. This list is derived from an associated list of courses which each faculty member had indicated he/she would be interested in teaching.

This module allows the user to modify (or specify initially) the list of faculty who will teach in a particular semester and to modify (or specify initially) the number of sections of each course to be taught.

Entry to the Decision Support System

Module: INITIALIZE
Functions
(1) Revise faculty list for the semester.
(2) Revise course offerings for the semester.
(3) Print the list of feasible teaching schedules and the associated utilities for each faculty member.

Module: FACULTY INPUT
Functions
(1) Allow entry to the file of any faculty member.
(2) Edit the list of courses used to generate teaching schedules.
(3) Edit the constraint parameters used to generate teaching schedules.
(4) Change the utility values for any faculty member.
(5) Generate a new set of teaching schedules using the current formulation from (2) and (3).
(6) Exit Module and update files in INITIALIZE.
(7) Exit Module without updating historical files.
(8) Print schedules and associated utilities for each faculty member.

Module: CLF (Create LINDO File)
Functions
(1) Create a 0-1 programming model for LINDO.

FACULTY TEACHING ASSIGNMENTS

FIGURE 2 -- DECISION SUPPORT SYSTEM
in that semester. The module also prints for any faculty member his/her list of courses of interest, the associated list of feasible teaching schedules with their historical utilities, and the constraint parameters for generating those teaching schedules (e.g. upper and lower bounds on weekly contact hours, upper bound on the number of different course preparations, etc.).

If the faculty member finds the list of teaching schedules and their associated utilities acceptable, the system prints a form which can be signed and returned to department administration. If instead the faculty member wishes to make any changes, the second module, FAC (Faculty) INPUT must be accessed.

FAC (Faculty) INPUT is used to generate a revised list of feasible teaching schedules for any faculty member or to revise the associated list of utilities for the current set of teaching schedules. The user is presented with a menu comprised of eight functions:

1. Function 1, which specifies the list of faculty members, is used to gain entry to the file of any individual member.
2. Function 2 edits the list of courses used for generating teaching schedules for any faculty member. Courses can be added to or deleted from the individual's list. The system will not allow inclusion of courses which are not on the list of departmental offerings for that semester.
3. Function 3 changes the constraint parameters used for generating feasible teaching schedules, i.e., the specified values for the minimum and maximum number of teaching hours and the maximum number of preparations can be altered. The allowable values are dictated by administration but can vary from semester to semester. For example, at Miami University the usual number of student contact hours per semester is about 9, but a faculty member can opt for combinations of lighter and heavier semesters if conditions permit.
4. Function 4 changes the utility values for the items in the current list of feasible schedules. The user can delete a schedule from the list as well as modify the utility value(s) for any or all of the schedules.
5. Function 5 generates a new set of feasible teaching schedules which conforms to any changes in parameter values input via functions (2) and/or (3). If no changes were made in Functions 2 or 3, the faculty member would be provided with his historical list of feasible schedules. After generating the list of
feasible schedules, the program directs the user to Function 4 which requests revised utilities for the new set of teaching schedules.

(6) Function 6 is used to exit the module and to update the historical file of teaching schedules and utilities of a faculty member in the INITIALIZE module per any changes made in Functions 2 through 5.

(7) Function 7 allows the user to exit the module without making any changes to the historical file in INITIALIZE. This function allows experimentation without effecting the historical file for any faculty member.

(8) Function 8 generates a printout of the list of feasible schedules and associated utilities for each faculty member.

The third module CLF (Create Lindo File) is a matrix generator which creates the 0-1 programming model described as the model base. This model conforms to the input format used in the LINDO software package [5]. The solution of this model is a list of schedules which optimizes schedule utilities for the department faculty.

The variables in the model are of the form

\[ x_{ij} = \begin{cases} 
1 & \text{if faculty } i \text{ receives his/her } j\text{th teaching schedule}, \\
0 & \text{otherwise.}
\end{cases} \]

These variables are named using the first three letters of the faculty member's last name and a number indicating the rank of the schedule based on the utility value assigned to the schedule.

The schedules which are part of the optimal solution to the 0-1 programming model can be used to assess the impact of varying scenarios on the faculty's teaching schedules. If the output is being used for actual scheduling, the schedules can be examined by the faculty and department administration. After making any appropriate changes, the schedules are finalized.

SUMMARY

A model based course/faculty scheduling system is a valuable tool for departmental planning. By using such a system, it becomes possible to see the impact of changing the number of sections of current offerings or of adding new offerings in a particular semester. Future course offering requirements can be projected and, based on historical schedules for current faculty; the necessary interests
and qualifications for any new faculty additions can be determined and considered. The impact on the department of a reduced teaching load or sabbatical for a particular faculty member can easily be measured. Thus it is possible to analyze the impact of any number of environmental or decision-based changes.

Furthermore, many of these changes can be evaluated with little effort on the part of the administration or the department faculty. The system becomes an attractive and valuable asset for departmental planning.

**Appendix**

A model [4] which uses decision variables to represent complete teaching schedules and which employs schedule utilities in the objective function can be formulated as:

$$\max \sum_{i,j} u(i,j) x(i,j)$$  \hspace{1cm} (1)

such that

$$\sum_{j \in J_i} x(i,j) = 1, \ i = 1, \ldots, i^*,$$  \hspace{1cm} (2)

$$\sum_{i,j \in J_i} c(i,j,k) x(i,j) = d(k), \ k = 1, \ldots, k^*,$$  \hspace{1cm} (3)

where

- $i^*$ = number of faculty members,
- $k^*$ = number of courses to be taught,
- $d(k)$ = number of sections of course $k$ to be taught,
- $J_i$ = set of feasible schedules for faculty member $i$,
- $x(i,j) = 1$ if faculty member $i$ gets schedule $j$,
- $x(i,j) = 0$ otherwise,
- $u(i,j)$ = utility measure of faculty $i$ for schedule $j$,
- $c(i,j,k)$ = number of times course $k$ appears in schedule $j$ for faculty $i$.

The model seeks to maximize the sum of all faculty member utilities for their assigned schedules while satisfying two constraints:

(a) Equation (2) requires that each faculty member is assigned only one teaching schedule, and

(b) Equation (3) requires that the schedules that are assigned include the required number of sections of each course.
Since each decision variable represents the assignment of a schedule to a faculty member, the schedule utilities are specified by the individual faculty members rather than calculated from course utilities. Thus, interaction between utilities for courses is no longer ignored, but instead included in the specified value for the schedule utility.

The possible schedules for each faculty member are determined from the set of all possible combinations of courses that a person might teach that do not violate teaching load or preparation constraints. Because the predetermined values for an acceptable number of preparations and teaching load hours for each faculty member is inherent in the generated schedules, course preparation and teaching load constraints need not be included explicitly in the model.

REFERENCES
EXCELLENCE” IS THE watch word of academe today. It is the drum beat for a procession of recent reform proposals, including one publication, subtitled “Realizing the Potential of American Higher Education.” (Involvement in Learning). This nation-wide report, and several others, are concerned primarily with the educational potential of students progressing toward graduation. We can readily grasp the inherent human worth of successful college graduates. But how do we feel about students who fail? Can we realize any further human potential by helping these students?

If a student fails, should he be shunned as an outcast from our colleges and universities? Should he be allowed a second opportunity to succeed or fail? Is academic failure a terminal disease or only a temporary malady? What is the prognosis for recovery from this condition? Can an institution salvage human potential by re-admitting the failed student?

These are challenging and persistent questions which confront educational planners concerned with academic bankruptcy. Academic bankruptcy simply means that a student’s past failures are forgiven so that he might re-enter college with a clean slate. Such a policy may help several types of students. For example, a student may have been in and out of probation or suspension several times, compiling such a dismal academic record that several extra semesters of passing grades would be necessary to qualify for graduation.

Another student may be penalized severely by grades from an unwise choice of major, and wishes to abandon this record when he enters another program more attuned to his interests and aptitudes. Still another student, overcoming youthful frivolity through several years of maturing in successful employment or military service, may desire to commence college anew as a mature adult. Whatever the reason for early failure, by expunging a previous rec-
ord, an individual may re-enter college without a millstone from the past. Should not a democratic institution that encourages individuals to succeed also allow them an unfettered right to try again?

On the other hand, persuasive reasons abound for denial of forgiveness and, thus, handicapping if not preventing a second opportunity. Is not everyone accountable for past deeds? Can we devote our time, effort, and resources to persons who misdirect their efforts? Is it a waste of taxpayers' and parental monies, as well as institutional resources, to attempt to salvage those who may possibly be unsalvageable? What are the mental health implications for a failed student who, after forgiveness, fails again? Moreover, is it fair to the hard working successful student, who may have struggled through every course to make a passing grade, for the institution to forgive the poor record of the failing student? These, too, are serious questions to ponder in addressing an academic bankruptcy policy.

RESEARCH HIGHLIGHTS

Most programs of academic bankruptcy require readmittance of failed students — an act itself that implies a certain degree of forgiveness. What does research tell us about these students? Will they succeed if given another opportunity? There have been surprisingly few studies during the past ten years, as compared with the previous decade, on readmitting academically dismissed students. Student clamor for relevancy and the ensuing campus turmoil during the 1960's and early 1970's may have encouraged some institutions to adopt a more lenient and flexible policy toward failing students.

Another plausible explanation may be the appearance in the late 1960's of many veterans, matured by their military experiences, who knocked on college doors for readmittance. Whatever the explanation, it appears that a large number of institutions adopted academic bankruptcy policies during that period or shortly thereafter.

Why do students fail? Lautz, et al., found that students give these reasons (listed in descending order of frequency):

- did not study enough, no clearly defined goals,
- too many personal problems,

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— irregular class attendance,
— could not get desired program,
— dissatisfied with the instructors or teaching,
— too many extracurricular activities,
— unhappy with chosen major,
— illness in family or other family problems, and
— dissatisfied with the university.

Some of these causes implicate institutional conditions, but most focus on personal matters, particularly a lack of motivation or maturity.

Does the failed student succeed when readmitted? In Hansmeir’s study of 294 Michigan State University freshmen who were subsequently dismissed and then readmitted, it was found that about 42 percent of these students were successful in their post readmission studies. Academic success, as measured by Hansmeir and others, was defined as maintaining at least a 2.00 grade point average (gpa) during the post readmission period. Hansmeir further determined that there was a sharp drop in the rate of success for students whose pre-dismissal gpa was low (1.00-1.49) as compared with those of higher gpa (1.50-1.99).

In a study of Florida State University freshmen who dropped out because of academic difficulty (below 2.00 gpa) and were subsequently readmitted, Carter and Schultz reported that 70 to 80 percent of the returnees made a gpa of 2.00 or greater during their second enrollment. The success rate varied according to the nature of the intervening experience. If this experience included attendance at a two-year college or taking a correspondence course, the returnee achieved a higher success rate as measured by the 2.00 gpa standard. Still, chances of graduating were less than 50 percent.

Are there measures to predict the success rate of failed students who are readmitted? The picture here is somewhat fuzzy. Yoder

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4Yoder, Felicia Anne. A Follow-up Study of Students Readmitted by the Purdue Committee on Scholastic Delinquencies and Readmissions. Ph.D. Dissertation, Purdue University, 1962.
in a 1962 dissertation at Purdue University summarized the results of an investigation of hundreds of Purdue students who had failed and later gained readmission. Her conclusions concerning factors that differentiate previously failed students — those with successful and unsuccessful comebacks — indicated that the successful student:

(a) is likely to have completed more semesters of work prior to re-admission,
(b) is likely to have changed major subjects more times,
(c) usually did not withdraw from school, whereas the unsuccessful student is likely to have withdrawn at least once,
(d) had earned slightly higher scores on the Purdue Math test but did not do significantly better on the Purdue English test,
(e) earned a grade point average near a “C”, whereas the unsuccessful student registered near a “D” minus, and
(f) is likely to have completed more semesters after readmission.

Additionally, Yoder reported that there was no significant difference between immediate readmission or re-entry after a specified time for either the successful or unsuccessful student. About 60 percent of the readmitted students eventually graduated.

The authors of these sparse, somewhat out-dated, and sometimes conflicting reports offer few clues for constructing an academic bankruptcy policy. Moreover, review of recent literature does not shed much light on current practices. Academic bankruptcy is generally not publicized. After all, who wants to risk having an institution’s role misconstrued as being “an academic dumping grounds for poor students?” Moreover, in this age of striving for excellence, institutional effort is bent more toward enhancing the successful student than salvaging the poor one.

PRACTICES AND POLICIES

In a 1968 study of 300 colleges, Chinetti and Brophy reported that three-fourths of them would consider for admission a student on drop status from another institution. Also, about the same proportion of institutions asserted that when a student applies for readmission at a school where he was previously dropped, the institu-

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Chinetti, Peter J. “Readmissions, Reentry and Marginal Admissions — Practices Followed in American Colleges,” College and University, Vol. 43, No. 64, Summer 1968, pp. 536-537.
tion would support the idea that the student should have engaged in some other type of activity for a period of time before re-entry. Chinetti and Brophy concluded, however, that readmission practices and procedures were not clear-cut and uniform among the majority of institutions surveyed. Comparable conclusions were reached by John Davis of East Carolina University.

A CURRENT SURVEY

For this report, an informal investigation was conducted by the author in the Spring of 1985. Twenty-five comprehensive, doctoral producing, state universities in Southeastern U.S. were surveyed to identify current academic bankruptcy practices. Of the twenty-three institutions responding, seventeen claimed no such practice. Two others would allow a dismissed student to re-enroll after a one-year absence, but there was no forgiveness of previous grades to qualify for academic bankruptcy.

One university had a unique practice of permitting any student, with approval usually of the dean, to have one semester of credits and grades completely erased. The eradication of a term could be accomplished retroactively. This general policy was applied, with slight modifications, by each college individually within the university. Dropping a semester was permitted only once with the assumption that a student may encounter unusual circumstances, perhaps uncontrollable, and thus would need this forgiveness to avoid marring an otherwise satisfactory record.

The remaining six universities in the survey had more conventional practices of academic bankruptcy. Two required a minimal absence of five years; one specified two years; two stipulated an absence of three years, and one stated “at least ten years.” The application of a forgiveness policy was different in each case. One university automatically discarded all former credits and grades, while another with the same policy allowed the dean to salvage some credits from the old record, but not the grades.

Another university automatically placed the academic “bankrupted” student on probation; others apparently classified their bankrupted students in regular status, e.g. “good standing.” An-

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other university mandated that the readmitted student complete 12 quarter hours after re-enrollment before petitioning for academic bankruptcy.

Three universities specified that all earned grades appear on the permanent record, one noted only a statement that academic bankruptcy had occurred. Representatives of the other two universities did not clarify this policy.

After re-entry under the bankruptcy policy, the student at one institution may have up to 15 percent of courses below "C" disregarded for graduation purposes. Two other institutions specified that at least 45 quarter hours and 64 semester hours, respectively, must be earned by the re-enrolled student prior to graduation.

It may be concluded from this small survey that (a) only a few — perhaps one-fourth — of the state universities have some form of academic bankruptcy and (b) each has its own unique set of policies.

DESIGNING A MODEL

Apparently there exists no optimal set of policies to accommodate academic bankruptcy. Academic planners must design their own model to encompass the philosophy, values, sanctions, and penalties inherent in the particular institution. A few guidelines are suggested herein to facilitate design of a viable program, although any format should be altered for local application.

(1) Permit former students to apply for academic bankruptcy if:  
   a) their previous GPA was less than 2.00  
   b) they were not enrolled in any college or university during the specified prior period of time, e.g. five years.

By limiting the policy to former students, the institution is taking care of its own and not risking the "dumping grounds" reputation by taking students who can't be admitted elsewhere. After some experience with native students, the doors may be opened to transfer students to evaluate the feasibility of extending educational opportunity more widely.

Secondly, this policy restricts bankruptcy only to students who seriously need a clean slate (less than 2.00 GPA) and not those trying to overcome a low average for honors, pride, or some other reason.

Absence from the campus for a specified period allows for maturation and restructuring of goals, values, and motivation by the student. Not accepting a student who enrolled elsewhere during the
absence is protection against a student who has failed elsewhere once, or several times, and now wants still another opportunity that is almost doomed to failure. Of course, if a student has enrolled elsewhere during the absence and succeeded, then bankruptcy is probably not needed as the gpa will be satisfactory.

(2) A petition for, or declaration of, academic bankruptcy should be filed by the student.

The petition may be reviewed by the college dean, an admissions committee, or other responsible party if it is deemed necessary to check each candidate for certain background factors or potentialities. Otherwise, a declaration can be accepted automatically if it is decided to give all bankrupted students a second chance.

The petition should clearly state all terms and conditions of academic bankruptcy and be signed and dated by the student so that any future misunderstandings or reneging can be averted.

(3) A “forgiveness” policy of not counting formerly taken courses in the requirements for continuing or graduating at the institution should be specified.

The simplest approach is “all or nothing” in considering former courses, thus providing a “clean slate” for bankrupted students. Although most of these students will be giving up a uniformly dismal record, this policy forces some with several passed courses to weigh the effects of forfeiture very seriously.

Some institutions allow the retention of passed courses, particularly if they apply toward a degree in the student’s course of study. Usually a college dean must approve the salvaging of these courses. Obviously, this policy helps students who were partially successful in their early scholastic careers.

(4) The student’s transcript should indicate that academic bankruptcy was granted.

Even though forgiveness provides a fresh start, perhaps with a renewed transcript, the student’s former record should be kept on file. Some institutions include the former courses and grades on the current transcript, although the new credits for a degree are clearly identified. In any case, the gpa is typically based on post-bankruptcy grades and a record must be retained of all courses taken.

(5) The readmitted student should be carefully monitored and guided to ward off further failure.

Some institutions admit the student on a probationary or condi-
tional status so that special attention may be given. Counseling and tutoring on a continuing basis in an academic development office or learning development center may be necessary.

The course load during the first semester may be limited by policy or reduced by an advisor. The college dean's office is frequently a source of review and guidance.

(6) The standards expected for continuous enrollment, and penalties for sub-standard performance, should be made known.

Confusion is avoided, if the readmitted student follows the existing regulations supporting academic standards. If a "C" average is not achieved during the first semester, for example, the student would be placed on probation. If the student can not meet probation standards, then institutional policies for suspension or dismissal would be invoked. These conditions should be clearly understood prior to re-enrollment.

In any event, the student should have at least two semesters, or the equivalent of a full course load for a year, to strive for a passing average. If the student cannot succeed during the allotted period, then dismissal is in order.

(7) Dismissal after academic bankruptcy should be final.

A policy of not permitting re-entrance and a second declaration of academic bankruptcy would be supported at most institutions.

Perplexing questions remain. Should these students be screened on the basis of aptitude testing? Should they be permitted to graduate with honors, after having discarded poor grades — an advantage not allowed regular students? Should students with learning disabilities, a history of emotional problems or other handicaps that caused their first dismissal be allowed in the program? Although problems posed by these questions loom large, they need not discourage program planning. The traffic of dismissed students applying for academic bankruptcy will probably be quite small so that accommodating them need not disrupt regular programs.

SUMMARY

In view of research findings, and in harmony with humanitarian or democratic ideals, academic planners may wish to provide some measure of forgiveness of past deficiencies to allow a dismissed student with sufficient maturity a second opportunity to complete a college education. By declaring academic bankruptcy, the student may be motivated and encouraged to re-enter college with a fresh
start. However, certain conditions and safeguards should be in place. A student should be readmitted only after a period of absence. A declaration or petition outlining conditions of readmission should be agreed upon by the student. The “forgiveness” of poor grades should be accompanied by forfeiture of courses and course credits. Transcripts should note the acceptance of academic bankruptcy. The readmitted student needs initial, if not continuous, guidance when subjected to normal academic standards. A second failure after an ample trial period should mean ineligibility to declare bankruptcy again.

Academic planners can create a viable plan for academic bankruptcy at their respective institutions if they construct a design that is compatible with institutional mission, secure faculty acceptance, and track the academic progress of applicants for further refinement and modification of policies. The design may then fulfill the measure of its creation: salvage of human potential.
Factors Influencing Students’ Perceptions of College Recruitment Activities

KATHLEEN PIKER KING, NORIKO KOBAYASHI AND LINDA G. BIGLER

PRESENTLY MANY COLLEGES and universities are experiencing declining enrollments because there are fewer eighteen to twenty-two year old individuals in the population. This smaller pool requires institutions of higher learning to employ alternative marketing techniques in addition to those which have traditionally been used. The present economic situation intensifies the competition between institutions, especially for small private colleges throughout the country. Administrators in higher education are recognizing that not only are business marketing approaches applicable to this situation, but they are also necessary to attract and maintain adequate student populations (Berry and George, 1975).

One of the most useful techniques in marketing research is a method of collecting information from a variety of sources. Riggs and Lewis (1980) pointed out that the use of even basic marketing research techniques in higher education has produced changes which have helped increase enrollment. Results from this type of research generally provide a broader perspective for the college decision-making process.

One rationale for marketing research is to identify which factors...
contribute significantly to a student's decision to attend a particular college or university. Klotz et al. (1972) outlined three primary objectives for admissions departments using a marketing perspective: 1) determine needs of prospective and existing students; 2) determine the specific benefits and resources of the institution; and 3) bring the two together in order to serve both the school and the student.

The study reported here represents the first step in Klotz et al.'s objectives for admissions departments by determining the needs of prospective students, particularly the factors that motivate students to choose a college. In the following paragraphs, an outline is provided of some of the factors that past research reports have discovered as being important in this decision process. As the review of the literature indicates, there are a wide variety of factors involved in the decision process. Some of the variables suggested in these research reports have been incorporated into the present analysis to determine the factors involved in deciding to attend a particular college.

One of the major influences revealed in past research is the amount of personal contact received, specifically the campus visit. Northwestern University established a program in which potential students visited Sunday through Monday evening (Ihlanfeldt, 1975). This enabled prospective students to meet with several students, faculty and admissions personnel. Ihlanfeldt (1975) rated the campus visit as extremely important in the college decision-making process. Another institution, Midcity College, set up a program whereby prospective students spent a week on campus attending various seminars (Dembowski, 1980). This extended time allowed for more contact with various individuals in the campus community. Dembowski's research indicated that the campus tour was the second most important factor, overshadowed only by the number of applications made to other colleges, in determining whether students attended Midcity College or another college.

Knight and Johnson (1981) suggested that an important motivating factor was the impressions made by faculty who expressed a genuine interest in a prospective student and demonstrated competence and knowledge in his/her field. Faculty members who maintain a good professional reputation seem to attract those students who are considered conscientious and hard-working (Campbell, 1977).
Other factors that are important in the decision-making process are the campus setting, the type of student body present, the location of the school, and the availability of recreational facilities (Campbell, 1977 and Wilson, 1971). Further, Gorman (1976) noted that family, friends, and former students were the most important sources of personal influences in the decision to attend a particular college.

In summary, what the results of the preceding studies indicate is the need for a college to examine a variety of factors, ranging from psychological to sociological to organizational factors, that influence students to attend a college. The present research attempts to examine some of the above mentioned factors, while incorporating other potentially important factors into the analysis. The variables of interest are: state of residence for students, intended major of the students, year in high school in which process of choosing a college began, source of information about the college, most important source of information about the college, evaluation of the sources of information about the college, and evaluation of the campus visit and the admissions office.

METHODS

The admissions staff at Mount Union College administered a questionnaire during orientation week to freshmen classes in 1981 and 1982. A computer generated random sample of one hundred and fifty questionnaires was drawn from these two class years. A similar format was used in the development of the questionnaires for each year. Not all the questions contained in the survey were used in the present analysis. Three of the questions were utilized as independent variables, and six questions were used as dependent variables. The independent variables were state of residence, intended major, and when decision to attend college was made. The dependent variables were possible sources of information about Mount Union College, the most important source of information, the factors involved in deciding to attend Mount Union, the most important factor involved in deciding to attend Mount Union, evaluation of different aspects of the college, evaluation of interaction with admissions staff, and evaluation of campus visit.

To provide information on the research setting, Mount Union College is located in Northeastern Ohio. The institution is religiously affiliated and has a student body of about 1,000 students.
DISCUSSION

Frequency distributions were run for the independent and dependent variables. The frequency distributions are available from the authors, but in order to conserve space only highlights of these distributions are discussed in this report.

In a profile of the freshmen, it was shown that the majority of students attending Mount Union College were residents of Ohio or nearby states. Fifty-eight percent of students intended to major in either accounting, business administration, economics, or computer science. About 54 percent of students chose a particular college during their junior year and 46 percent chose a college during their senior year in high school.

Students received information about the college from a wide range of sources. However, the campus visit, current Mount Union students, and the admissions' staff were the major sources of information. When students were asked to rate the most important source of information in the decision to attend Mount Union, 44 percent rated campus visit as being most important.

Students evaluated on a three-point scale (positive, neutral, negative) factors involved in the decision-making process, most important factors involved in the decision-making process, different aspects of the campus, and interactions with the admissions' staff. Overall ratings were positive for all four questions. This can be explained in part by the tendency of entering freshmen to view everything as new and exciting, thus reacting in positive terms. As for factors involved in the decision process, students gave 2.5 ratings on the three point scale to the size of the college, academic facilities, nature of student body, geographical location, and coed student body. When students were asked to rank the most important factors in the decision process, size of the college, campus visit and academic reputation received the highest rankings by respondents, with over 40 percent of the respondents ranking these factors highly.

The authors of other research studies (Dembowski, 1980; Campbell, 1977; and Ihlanfeldt, 1975) have indicated that campus visits were the major source of information for potential students, and the present study substantiates these findings. In contrast, only a

1Because of the skewed nature of the data, it was necessary in some of the statistical analyses to collapse the three-point evaluative scale into only two categories.
small percentage of respondents obtained information from such sources as college fairs or the College Board Search Service. These findings suggest that colleges and universities would do well to determine which sources of information students rely on most heavily and devote primary efforts in these areas to conserve budgetary allocations.

The present findings indicate that faculty were not a significant influence in the decision process. This constitutes a deviation from previous research (Knight and Johnson, 1981). Either the prospective students had little if any contact with faculty members or contact with faculty members did not leave much of an impression. This finding suggests the importance of carefully controlling the nature of contact with faculty members, or any representatives of a campus community.

Interestingly, students did not perceive cost as the most important variable in the final decision process. The finding does not necessarily lead to the conclusion that cost was not an important consideration in the decision process. Perhaps students who had cost considerations did not come to Mount Union or the availability of financial aid overrode cost as a consideration.

### TABLE 1

<table>
<thead>
<tr>
<th>Attitude Toward the Cost of Attending Mount Union College by State of Residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Toward the Cost of Attending Mount Union</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Negative</td>
</tr>
<tr>
<td>Non-Negative</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Number of Cases</td>
</tr>
<tr>
<td>(Total Number of Cases)</td>
</tr>
</tbody>
</table>

Chi-Square = 5.6; 1 d.f.

P ≤ .05

Contingency Coefficient = .21
In addition to the data discussed in the preceding paragraphs, cross tabulations were run to determine the relationships between the variables. The following discussion addresses only the interrelationships which were found to be statistically significant.

The first such relationship existed between state of residence and the cost of attending Mount Union College. Here the percentages of Ohio residents were evenly split between categories of the student's reactions to cost. In comparison, a fairly low percentage, 22.2 percent of the non-Ohio residents responded negatively to the cost, whereas 77.8 percent reacted either positively or neutrally to cost. Since Mount Union College draws most of its out-of-state students from the East coast, these students were operating from a different cost reference point than were the Ohio resident. While the college might appear expensive to students from Ohio, students familiar with East coast expenses saw the college's cost as reasonable or acceptable.

A relationship existed between the intended major of the student and the influence of friends presently attending Mount Union College. The highest negative response, 50 percent, came from the group of intended science majors. The education majors experienced a positive influence from friends, 30.5 percent, as did computer majors and other majors, 27.8 percent. However the highest

<table>
<thead>
<tr>
<th>Influence of Friends</th>
<th>Business and Economics (%)</th>
<th>Education and Communication (%)</th>
<th>Sciences (%)</th>
<th>Computer (%)</th>
<th>Other (%)</th>
<th>Undecided (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>25.0</td>
<td>13.0</td>
<td>50.0</td>
<td>11.1</td>
<td>22.2</td>
<td>23.1</td>
</tr>
<tr>
<td>Neutral</td>
<td>56.8</td>
<td>56.5</td>
<td>31.2</td>
<td>61.1</td>
<td>50.0</td>
<td>15.4</td>
</tr>
<tr>
<td>Positive</td>
<td>18.2</td>
<td>30.5</td>
<td>18.8</td>
<td>27.8</td>
<td>27.8</td>
<td>61.5</td>
</tr>
</tbody>
</table>

Number of Cases: (132)

Chi-Square = 19.9; 10 d.f.
P < .05
Contingency Coefficient = .36
percentage, 61.5 percent of positive influence from friends, was for the undecided majors.

There are several similarities between the relationship in Table 2 and the relationship between the impression of the major department and the intended major. The highest negative percentage was 50.0 percent for the science majors. In contrast, 30.5 percent of the education majors responded positively and 61.5 percent of the undecided majors responded positively to their major departments. The highest percentages appeared in the neutral column indicating a certain amount of indecisiveness on the part of freshmen toward their major departments. Perhaps this would be expected given the limited contact with the departments at that point in the college careers of freshmen.

<table>
<thead>
<tr>
<th>Impression of the Major Department</th>
<th>Business and Economics (%)</th>
<th>Education and Communication (%)</th>
<th>Sciences (%)</th>
<th>Computer (%)</th>
<th>Other (%)</th>
<th>Undecided (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>25.0</td>
<td>13.0</td>
<td>50.0</td>
<td>11.1</td>
<td>22.2</td>
<td>23.1</td>
</tr>
<tr>
<td>Neutral</td>
<td>56.8</td>
<td>56.5</td>
<td>31.3</td>
<td>61.1</td>
<td>30.0</td>
<td>15.4</td>
</tr>
<tr>
<td>Positive</td>
<td>18.2</td>
<td>30.5</td>
<td>18.2</td>
<td>27.8</td>
<td>27.8</td>
<td>61.5</td>
</tr>
</tbody>
</table>

Number of Cases: (44) (23) (16) (18) (18) (13)

Chi-Square = 19.9; 10 d.f.

P < .05

Contingency Coefficient = .36

When examining the influence of when the decision to attend college was made, several interesting relationships emerged. The first significant relationship was between the campus visit and when the decision to attend college was made. Overall, the responses were positive. However, there was a noticeable difference in the percentages, with a much higher percentage 93.6 percent of those who began deciding on a college in their junior year compared to the 68.2 percent of those who started looking at colleges
during their senior year viewing the campus visit in a positive way. Seemingly, students became more critical of recruiting techniques in their senior year, as reflected in the 31.8 percent of these students who viewed the campus visit in a non-positive way.

Interestingly, these two groups of students reacted in almost opposite ways in response to their contact with the admissions staff at Mount Union College. A high percentage, 60.8 percent, of the students who started choosing a college during their junior year gave a positive response. Whereas, 61.5 percent of the students who began choosing a college during their senior year, gave a non-positive response in reference to their contact with the admissions staff. As in the previous relationship, students who began looking at colleges in their senior year were more critical in their assessments.

Reactions to the interview with admissions staff, letters from the admissions office and quality of the meetings with the admissions staff differed by when the decision to attend college was made. The results indicate that the individuals who began looking at colleges during or before their junior year in high school assessed such contacts positively. In contrast, those students who made their decision
FACTORS INFLUENCING STUDENTS' PERCEPTIONS

TABLE 5
Reaction to Contact With Admissions Staff by Year Students Start to Choose a College

<table>
<thead>
<tr>
<th>Reaction to Contact With Admissions Staff</th>
<th>During Senior Year (%)</th>
<th>Prior to Senior Year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>38.5</td>
<td>60.8</td>
</tr>
<tr>
<td>Non-Positive</td>
<td>61.5</td>
<td>39.2</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>(65)</td>
<td>(79)</td>
</tr>
<tr>
<td>(Total Number of Cases)</td>
<td>(144)</td>
<td></td>
</tr>
</tbody>
</table>

Chi-Square = 6.2; 1 d.f.
P ≤ .05
Contingency Coefficient = .22

to attend a college in their senior year were not positive in their evaluation of their contact with the admissions staff.

TABLE 6
Reaction to Interview With Admissions Staff by Year Students Start to Choose a College

<table>
<thead>
<tr>
<th>Reaction to Interview With Admissions Staff</th>
<th>During Senior Year (%)</th>
<th>Prior to Senior Year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>36.7</td>
<td>64.5</td>
</tr>
<tr>
<td>Non-Positive</td>
<td>63.3</td>
<td>35.5</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>(60)</td>
<td>(76)</td>
</tr>
<tr>
<td>(Total Number of Cases)</td>
<td>(136)</td>
<td></td>
</tr>
</tbody>
</table>

Chi-Square = 9.3; 1 d.f.
P ≤ .01
Contingency Coefficient = .26
TABLE 7
Reaction to Letters From Admissions Office by Year Students Start to Choose a College

<table>
<thead>
<tr>
<th>Reaction to Letters From Admissions Office</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>During Senior Year (%)</td>
</tr>
<tr>
<td>Positive</td>
<td>70.1</td>
</tr>
<tr>
<td>Non-Positive</td>
<td>29.1</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>(67)</td>
</tr>
<tr>
<td>(Total Number of Cases)</td>
<td>(146)</td>
</tr>
</tbody>
</table>

Chi-Square = 5.6; 1 d.f.
P ≤ .05
Contingency Coefficient = .21

TABLE 8
Reaction to Quality of Meeting With Admissions Staff by Year Students Start to Choose a College

<table>
<thead>
<tr>
<th>Reaction To Quality Of Meeting With Admission Staff</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>During Senior Year (%)</td>
</tr>
<tr>
<td>Positive</td>
<td>43.3</td>
</tr>
<tr>
<td>Non-Positive</td>
<td>56.7</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>(60)</td>
</tr>
<tr>
<td>(Total Number of Cases)</td>
<td>(134)</td>
</tr>
</tbody>
</table>

Chi-Square = 7.9; 1 d.f.
P ≤ .01
Contingency Coefficient = .25
When examining the relationships between the variable of most important sources of information about Mount Union College and the other variables, one relationship was statistically significant. The relationship between important sources of information and state of residence is shown in Table 9. The campus visit had the highest percentages for both Ohio and non-Ohio residents. However, the campus visit was particularly crucial for the non-Ohio residents, with 67.9 percent seeing this as the most important source of information, compared to only 40.2 percent of the Ohio residents. The admissions staff had nearly equal influence over both groups. However, both Ohio and non-Ohio residents did not rate Mount Union alumni or high school guidance counselors as very important sources of information.

**TABLE 9**

<table>
<thead>
<tr>
<th>Important Source Of Information</th>
<th>State of Residence</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ohio (%)</td>
<td>Out-of-State (%)</td>
</tr>
<tr>
<td>Mount Union Students and Faculty</td>
<td>25.0</td>
<td>3.6</td>
</tr>
<tr>
<td>Mount Union Alumni</td>
<td>9.8</td>
<td>7.1</td>
</tr>
<tr>
<td>Guidance Counselors</td>
<td>8.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Campus Visit</td>
<td>40.2</td>
<td>67.9</td>
</tr>
<tr>
<td>Admissions Staff</td>
<td>16.1</td>
<td>17.8</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Number of Cases</td>
<td>(112)</td>
<td>(28)</td>
</tr>
<tr>
<td>(Total Number of Cases)</td>
<td>(140)</td>
<td></td>
</tr>
</tbody>
</table>

Chi-Square = 9.8; 4 d.f.

P ≤ .05

Contingency Coefficient = .26
CONCLUSIONS AND IMPLICATIONS

Revealed in the analyses of data are a number of important factors in the decision process for students attending Mount Union College. It is possible that these factors are influential in the decision processes of other students. A campus visitation program was extremely important in recruiting students to Mount Union College. This strongly suggests that colleges need to develop techniques to draw students to the campus setting, so that the merits of the colleges can be shown. More research should be done on how many students come for campus visits, but then decide to go to another college and the reasons for such decisions. Further, what are the elements of the campus visitation program that attract students to certain colleges? Once these dimensions are identified by colleges, they can be emphasized and improved for campus visitation programs.

Students usually attend institutions of higher education within their home state or within a 100 mile radius of home; this tendency was reaffirmed in this study. However, in states which have a large number of colleges and universities, the need exists to determine what factors motivate students to attend schools outside their familiar territory. Once these factors are identified, a more efficient recruiting strategy can be implemented to focus on these types of students and to emphasize certain aspects of institutions or regions that draw these students.

The data reported strongly suggest that out-of-state Mount Union students have different perceptions and are a different type of student than in-state Mount Union students are. Such an observation is possibly true for out-of-state students in other institutions. Institutions who are interested in attracting a large number of out-of-state students should ascertain how these students differ from in-state students in order to make a more effective recruiting effort.

Since the size of Mount Union College was the prime factor in the decision process of students, small schools may want to determine what characteristics they possess that appeal to students so that these attributes can be emphasized in recruiting efforts. Equally important to ascertain is what types of student do small colleges attract, so that more effective appeals can be made to particular clientele. Such a directed approach would make maximum use of limited resources.
What emerged as a particularly interesting finding was that students who began looking at colleges in their senior year were more critical of admissions' activities than students who began looking in their junior year. These data indicate that these two groups of individuals are different types of prospective students. They are at different points in their decision processes and have different maturity levels and, consequently, need exposure to separate experiences and information. It would be useful to determine whether students who began choosing a college in their junior year became impressed with their first sample of college contacts and then stopped looking at other alternatives, or whether these students continued to critically examine all colleges until they were ready to make a final decision. Since the campus visit was so important for junior year students in their decision process, the data suggest that admissions staff should contact juniors in high school and bring these students for campus visits. It is also important to have these students on campus before they become overwhelmed with contacts from other colleges, and as a result become more skeptical of the recruiting process and techniques.

The results showed that students with different intended majors represented different types of prospective students. While an admissions staff would be hard pressed to devise a separate recruiting strategy for every major, it might be well to assess whether one particular major, perhaps the largest major, was an unique group that merited special recruiting attention. Knowledge of at least some of the crucial differences in expectations of students with certain intended majors and the reasons behind these differences might result in higher acceptance and retention rates.

Litten (1981) implied the need to involve the entire campus in recruiting. As the present research shows, this involvement is very important because of the campus community's influence on prospective students, particularly during the campus visit. Litten suggested educating various campus constituencies through workshops and research concerning the needs of prospective students in order to more effectively present information about an institution. The involvement of the entire campus community in the recruiting process will probably become more important in the future to compete for students.

The present research shows that current students played a role in the decision process for prospective students by conveying their
views about the institution. This finding suggests the importance of identifying which types of students are the best potential recruiters or guides for campus visitation programs. Recruiting staffs need to be aware of both the positive and negative opinions of students so that some of the negative aspects of the institution can be changed and the positive aspects can be emphasized. Also, many students go on to become alumni, and as the data in this study indicate, alumni were important sources of information about an institution. Consequently, it is necessary to know current students' attitudes and opinions because in all probability these feelings will be the information — positive or negative — that students possess upon graduation.

While we may acknowledge at a common sense level that prospective students represent diverse groups, rather than a congruent pool of students, the need exists to identify what differences delineate these students. How do these differences influence perceptions of an institution and its recruiting techniques? The results of present research showed the importance of examining a wider range of variables in order to determine the perceptions of students. Future research needs to analyze the influence of psychological, sociological, and organizational factors.

While to some the preceding paragraphs may appear to be an overly pragmatic approach to recruitment, institutions of higher education may not have a choice in the next decade. Such an approach may be a matter related to institutional survival. The need to tailor effectively information to certain groups of students will become more crucial as the pool of potential students shrinks and college resources dwindle.

REFERENCES
Enrollment Management: Successor to Marketing or Its Synonym?

JOHN W. ALBRIGHT

Enrollment Management is being hailed as the most significant student recruitment and retention concept of the 1980s. Could it be that enrollment management is just a synonym for "marketing," the admissions buzzword of the '70s, that administrators have been sugar-coated to make more palatable to their neighbors in the ivory tower?

Textbooks and seminars have educated college administrators about marketing for the past decade. Colleges learned that the full application of the marketing concept would pull all of their resources and people into a dynamic relationship with their potential "customers." These customers are students, alumni, legislators, trustees, businesses or other significant publics who could use college services or provide support. The colleges then adapt the weapons in their marketing arsenals — products, pricing, promotion and delivery systems — to what their markets need or what they can be convinced they need.

But applying such terms from the workaday business world to the operation of ivory towers runs against the grain of the typical academician, who resides there. Administrators who are guilty of using those words too often are viewed with suspicion. Even alumni or trustees who themselves are business people get uncomfortable when their educational institutions embrace such crassness too closely.
“Enrollment management,” on the other hand, sounds different. The term connotes an attempt at being business-like without the taint of used-car hucksterism commonly associated with “marketing.”

The synonymous relationship of marketing and enrollment management is starting to be noticeable. The College Board has sponsored summer conferences on the topic of enrollment management. Substitute the word marketing for enrollment management in their schedule of events, and the conferences begin to sound like those that were offered a decade ago for the same teams of top college management that are invited now. A similar substitution is easily interpreted for some of the advertisements that are now starting to appear in the Chronicle of Higher Education for Directors of Enrollment Management.

This is not to grouse that there is nothing new under the sun. Enrollment management merges the role of recruiting into the academic and student services worlds. This new approach takes the long view. It measures the results of recruiting not just by the number of new students enrolled but by the number who become successful, well adapted undergraduates and productive alumni. Everyone on campus gets involved in the process. Enrollment management, like the marketing concept which is part of it, asks the institution to reexamine all of its programs and policies in light of long term enrollment impact.

The point is that this new interest in enrollment management, as well as use of the term itself, may be symbolic of a new step in the evolution of American colleges. This may be one more acknowledgment that the cottage industry of higher education needs — and has been developing — a professional approach to managing itself.

The widespread myth still persists that teachers run colleges. Most college charters say that faculty have considerable input in making policy, of course, but the popular assumption goes beyond the setting of policy. It is part of our popular culture that kindly Mr. Chips, the full professor, has an inherent expertise given him along with his tenure to be able to succeed any retiring admissions director, physical plant manager, campus planner or president.

The notion that top college administrators are all teachers on sabbatical is a popular one, too. What university admissions dean, in charge of a half million dollar budget and a staff of 35, has not
been asked by a high school student or his parents at a college night program, "And what do you teach?" What college president, plucked decades earlier from the ranks of the faculty, has not been applauded when he or she openly muses about teaching an occasional course. It is as if college administration is what professors must do when they draw the short straw at the faculty meeting.

Instead, a growing class of professional college administrators has evolved who have no teaching credentials or, if they did, fully intend never to return to the classroom. This professional evolution among the middle management of colleges has been hastened by enrollment fluctuations and financial crises, the growth of large, complex multi-versities, and the polarization of teaching faculty and administrators through unionization, departmentalization, and specialization.

Admissions officers in this evolutionary milieu have been cast adrift. An increasing number no longer are claimed by the academic world that spawned them and their registrar antecedents. Many offices of admission are being shifted away from control by academic vice presidents to homes under vice presidents for student services (another group of misunderstood administrative specialists).

The prevailing image of admissions officers has been that they are only well dressed agents of faculty policy for the admission of student applicants. This image is fading, fast. Admissions officers are good communicators and data managers, too. Colleges are beginning to appreciate the personnel in their admissions offices for the expertise they can offer in institutional promotion and planning.

A very few admissions officers have gained full partnership on their campuses in systems for enrollment management. The best evidence of their acceptance comes when they receive the title of vice president. The campus-wide management of enrollment requires sizeable clout across the whole administrative and academic spectrum.

Assume, however, that you are an admissions officer which has no such clout. Your office also has little chance in the near future of receiving any comprehensive authority to marshal the resources of your college for recruitment and retention. Is enrollment management one more "tool of the decade" that you can only wistfully covet but never use?
The answer is no. Enrollment management, like college marketing, is a conceptual ideal in an imperfect world. The successful admissions officers are largely the ones who, by force of personality, professionalism and track record, can lead their institutions into each succeeding New Age without being in charge and without getting credit. It is appropriate that our institutions of higher learning employ admissions professionals who themselves must continually learn about the new techniques of their emerging craft. These craftsmen must adapt the best of those new ideas and technologies to their own institutions. Then they must persuade the many controlling, conflicting forces within their institutions that such new approaches are worthy enough to be adapted as institutional policy.

In the final analysis, enrollment management at most colleges will hinge on effective leadership from within, from the middle of the management chart, as much as it does on leadership from the top. This is the peculiar nature of life in the ivory tower. Enrollment management, by whatever name, will best gain acceptance if admissions officers and their enlightened superiors promote the concept as another malleable concept worthy of consideration in the free marketplace of ideas that is college management today.
Evaluating student performance, through the use of grades, has long been recognized as an integral and indispensable part of academia. Although grading is at best inaccurate and unreliable, it is so ingrained in the educational process that to negate its use would render the assessment of student performance all but impossible. From the perspective of an institution, grades have been used to determine how well students have met academic standards and to predict success in graduate schools.

Traditionally, grades have served as marks of quality control for the institution itself, the public in general and prospective employers. This was particularly true during the 1955-1965 period when grade "deflation" was apparent (Hendrickson, 1976). This period was characterized by higher scholastic aptitude test scores with a grade distribution that remained constant. Since the early 1970's, however, concern has been expressed over grade "inflation." Generally, grade inflation is attributed to the rise in the average level of undergraduate grades accompanied by a decline in national average scores, over the same period of time, on Educational Testing Service's Scholastic Aptitude Test (Bejor and Blew, 1981).

Grade inflation has caused concern among university educators throughout the nation, and O'Connor (1979) maintained that the...
most serious consequences are a cheapening of the academic product and diminishing confidence in grades as an indicator of student achievement. Researchers in the area of grading have suggested that confidence in the validity of grades has somewhat decreased. In a study of some 50 colleges and universities, Seslow (1979) reported that the percentage of A grades for undergraduates more than doubled from 16 percent to 34 percent, while C grades were reduced by nearly one half. These findings support a survey by Hendrickson (1976) who found an overall increase in the number of A grades and a decline in C grades given to undergraduate students. Pressley (1976), in his study, found that during the spring of 1976, Dartmouth College awarded grades of A to 41 percent of graduating seniors, while 27 percent of the seniors at Vassar received a grade of A and an additional 44 percent of those seniors received a grade of B.

Although the specific reasons for grade inflation are unclear, the authors of several studies have offered some hypotheses. Kloerzon (1981) and Geisinger (1980) maintained that the use of a variety of grading practices by faculty members contributes to grade inflation. Non-traditional grading methods such as contract grading, peer and self-evaluation and a variety of extra credit options, supplement the traditional evaluation model of midterm and final examinations. Moreover, subjective factors such as class participation, effort and enthusiasm towards the course are variables often taken into account for final grades.

Another factor of concern is the inconsistency in evaluation philosophies held by faculty members when assessing student performance. According to Geisinger (1980), the same student can receive a different grade for the same course depending upon which of three philosophies a faculty member embraces. In essence, student evaluations can be based on: (1) the degree of gain in achievement from the beginning of a course to its conclusion; (2) the overall level of the student's performance in relation to group norms; or (3) the amount of achievement a student demonstrates in relation to his/her own potential.

When looking at what professors actually tried to communicate to students through grades, Lunneborg (1978) concluded that there were three separate sets of grading purposes. Student-centered grading was found to promote reward, feedback and motivation. Second, institution-centered grading provided a decision
making vehicle for students, graduate schools and prospective employers. Finally, the record-keeping purpose was viewed as assessing teaching effectiveness and setting a standard of social accountability.

Faculty who view grading as student-centered believed that grade inflation was of little or no consequence. On the other hand, faculty who viewed grading as either institution-centered or conducted for the purpose of record-keeping stated that grade inflation was a real and major concern.

When considering instructor characteristics and their relationship to grade inflation, no age-related or sex-related differences were found when awarding high grades to students (Geisinger, 1980). This finding negates the popular belief that younger faculty tend to assign students higher grades in an effort to gain more positive student evaluations for purposes of tenure and promotion (Stumpf and Freedman, 1979). Moreover, McKeachie and others (1974) found that role perception of faculty members was related to grade assignment. Instructors who considered themselves in the facilitator-person role tended to assign higher grades than those who viewed themselves in the role of expert-authority.

**METHODOLOGY**

In light of the current concern over grade inflation, the study reported here presents a comparison between survey responses of deans at 205 American colleges of arts and sciences and 100 deans of colleges of education regarding the extent of grade inflation on their campus. Liberal arts colleges were selected at random from Barron's Profiles of American Colleges, Twelfth Edition, 1980. Colleges of education were selected at random from Peterson's Annual Guide to Undergraduate Study, 1983. The purpose of the study was: (1) to determine the extent to which grade inflation is a matter of concern and current inquiry; (2) to ascertain the role of various factors as either contributing or not contributing to grade inflation; and (3) to determine the differences and/or similarities which exist between liberal arts colleges and colleges of education. A total of 160 completed questionnaires were returned by deans of liberal arts colleges and 83 questionnaires were returned from deans of colleges of education.

Three summary tables are included. In Table I, data are summarized concerning respondent attitudes toward grade inflation. In
Table II are displayed data regarding factors viewed as contributing to grade inflation, while Table III includes data about those factors which were viewed as not having contributed to grade inflation.

LIMITATIONS OF THE STUDY

Some limitations exist with respect to the study. Due to economic considerations, there was no contact with respondents prior to mailing the survey instrument. The mailed questionnaire technique of sampling is, in general, considered less acceptable than other research methods, and the instrument was directed only to deans of the sampled institutions. The results, therefore, reflect only a limited administrative viewpoint and do not include faculty responses. On the other hand, the survey instrument was critiqued by three university faculty members in an attempt to locate ambiguities and to assure accuracy of content.

A random sample of six of the forty-five non-respondents from colleges of arts and sciences and five of the seventeen non-respondents from colleges of education was contacted by telephone to determine if their responses differed greatly from those returning completed questionnaires. Responses from all eleven deans yielded no significant difference.

FINDINGS

The first question of the survey was designed to assess the degree of current concern over grade inflation. Deans from 120 liberal arts institutions and deans from 59 colleges of education indicated that grade inflation was both a real and current concern. Moreover, respondents from 130 liberal arts colleges and from 59 colleges of education stated that they were actively investigating the causes of grade inflation. Investigation into this question ranged from “casual inquiry at the department level” to the formation of a college-wide committee. Five colleges of education listed the faculty senate as the investigative group. As seen in Table I, a large majority of both colleges of liberal arts and colleges of education are concerned with grade inflation. Colleges of liberal arts, however, were found to be more likely to inquire into the reason for grade inflation than colleges of education, and this difference was found to be statistically significant ($\chi^2 = 12.36; df = 2; p < .01$).

A majority of deans from both liberal arts and education facul-
ties agreed that three factors did not appear to contribute to the phenomenon of grade inflation. When asked if the improved academic quality of students was a factor contributing to grade inflation, 114 liberal arts deans (71 percent) answered in the negative while 46 respondents (29 percent) indicated that students were better prepared academically today than those of previous years. These findings were supported in almost identical proportions by 59 deans of colleges of education (72 percent) who doubted that an improved quality of student accounted for grade inflation, while 23 education deans (28 percent) indicated that students were either "working harder" or were "more conscientious" in their pursuit of attaining higher grades.

O'Connor (1979) reported that the lowering of grading standards, based on more permissive entrance requirements, was a factor contributing to grade inflation. Deans at 128 (94 percent) liberal arts schools disagreed. Deans from colleges of education revealed a similar response in that 58 (81 percent) institutions did not believe that less stringent entrance requirements contributed to grade inflation. Deans from both types of institutions also agreed that a concept of grades being less important today than in years past does not contribute to grade inflation. The majority of arts and science deans indicated that this was not a contributory cause while only 17 respondents disagreed. An even larger percentage of college of education deans (97 percent) supported this view.
As seen in Table II, however, only one of these factors was found to be statistically significant. Deans of colleges of liberal arts were found to be more likely than deans of colleges of education to state that faculty lowering grading standards does not contribute to grade inflation. This different was found to be statistically significant at the .001 level ($x^2 = 55.135; df = 2; p < .001$).

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>DEANS OF COLLEGES OF ARTS AND SCIENCES</th>
<th>DEANS OF COLLEGES OF EDUCATION</th>
<th>CHI-SQUARE</th>
<th>PROBABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Faculty lowering grading standards</td>
<td>137</td>
<td>128 (94%)</td>
<td>8 (6%)</td>
<td>72</td>
</tr>
<tr>
<td>2. Grades viewed as less important now than in years previously</td>
<td>135</td>
<td>118 (87%)</td>
<td>17 (13%)</td>
<td>77</td>
</tr>
<tr>
<td>3. Improved academic quality of students</td>
<td>160</td>
<td>114 (71%)</td>
<td>46 (29%)</td>
<td>82</td>
</tr>
</tbody>
</table>

*Total number of responses to each question

A question was also asked to determine if there was a degree of reluctance on the part of faculty to fail students. Responses from colleges of arts and sciences to this question was low in that only 66 schools responded. Although over ninety-five percent of the respondents indicated that faculty were not reluctant to fail students, deans at three institutions stated that open enrollment practices and an increase in the number of disadvantaged students may contribute to the awarding of higher grades than would normally be expected. The low number of respondents, however, may indicate that some deans were not willing to pass this kind of judgment on their faculty.

In contrast, the majority of college of education respondents (56) replied in the positive with thirty percent of these respondents listing “litigation fears” as a primary concern. An additional 30 deans indicated that fear of “poor student evaluations” was a factor in faculty reluctance to fail students. While one dean stated that the “fac-
ulty voted to reject the use of D and F grades.” Several noted that current professors, many of whom are by-products of the 1960's, tend to be more permissive in their grading practices than those who did not come out of that era. One respondent noted that fear of retrenchment, due to low enrollment numbers in a few departments, was a key factor in awarding higher grades.

Student evaluations and their relationship to promotion and tenure consideration of faculty have constituted a growing concern (Weller, 1984). When asked if grade inflation could be attributed to the use of student evaluations in granting tenure and promotion to faculty, 102 deans of colleges of arts and sciences indicated agreement. On the other hand, 16 deans commented that student evaluations received the least amount of consideration for promotion and tenure, and 13 deans questioned the use of student evaluations at all.

Concern focused on the students’ inability to assess accurately teaching competency and, more specifically, faculty members’ mastery of subject matter. Deans of colleges of education (58) also agreed. Three of these institutions noted that “administrative use of student evaluations” definitely has an impact on faculty attitudes toward student input. As one respondent stated, “Too often, student evaluations appear to be based on how well faculty relate to students in general as opposed to their caliber of teaching.” When this happens, the process of education becomes a popularity contest with the “tail wagging the dog.” Moreover, 23 respondents echoed the sentiments of one dean who said: “It’s tit for tat — if you give me high grades on tests, etc., I’ll give you a high evaluation.” Another dean stated that “a grade of ‘C’ has come to be perceived as a failing grade and students most naturally expect B’s or better.”

Another question asked if the demands of advising, committee work, teaching and research contributed to grade inflation. Liberal arts college deans at 114 institutions (83 percent) indicated that one or more of these demands could have an effect on grade inflation. Nineteen respondents (14 percent) specifically indicated that economic considerations, which had accounted for an increase in teaching assignments, larger students enrollments per class and heavier advising loads, contributed to a decrease in the amount of time faculty could spend on grade analysis and assignment. Only five deans (4 percent) mentioned the demand for publishing as be-
ing a contributing factor to grade inflation. While the majority of respondents from colleges of education (59) stated that the demands of advising, committee work, teaching and research did not contribute to grade inflation, the remaining twenty-four respondents echoed their liberal arts counterparts by indicating that one or more of these demands could have an effect on grade inflation.

Several deans mentioned the "current call to accountability" which has led to an increase in teaching assignments and heavier advising loads per faculty member. Four deans (5 percent) mentioned research demands on faculty time as a "possible" cause of grade inflation. The low number of responses citing demands for publication and research from both types of institutions is interesting in the light of the much touted "publish or perish" syndrome.

A question was also asked to determine if the variety of grading options open to students to improve their course grade contributed to grade inflation. Deans from 104 colleges of arts and sciences agreed that this was a contributing factor to the grade inflation process. However, many respondents viewed this as a positive feature in that it provided students with an opportunity to enrich and extend their learning endeavors in ways most beneficial to them. Concurring with their liberal arts colleagues, seventy-four deans of colleges of education stated that a variety of options to improve

<table>
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<th>DEANS OF COLLEGES OF EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Variety of options available to students for improving a final course grade</td>
<td>135</td>
<td>104 (77%)</td>
</tr>
<tr>
<td>2. Student evaluations as a consideration for faculty tenure and promotion</td>
<td>135</td>
<td>102 (76%)</td>
</tr>
</tbody>
</table>

*Total number of responses to each question
grades did contribute to grade inflation. Thirty-seven of these respondents agreed with the principle of using a variety of grading options because "professional schools use different grading techniques to assess mastery of different course content." One dean responded that the "opportunity to gain a higher grade in a course through the retake procedure serves only to enhance the learning income."

An analysis of data as presented in Table III, showed that deans of colleges of education were more likely than their counterparts in arts and sciences to consider that a variety of grading options for students contributes to grade inflation. This difference was found to be significant at the .05 level ($x^2 = 7.165; df = 2, p < .05$).

**CONCLUSIONS**

Responses from deans of both liberal arts colleges and colleges of education reinforced the findings of existing literature which maintains that schools throughout the country are concerned with the issue of inflated grades. Moreover, the degree of concern is such that a large number of institutions sampled are making inquires into the causes of grade inflation. Results of this study yielded two major causes of this phenomenon as agreed upon by both liberal arts and college of education deans: (a) the use of a variety of options available to students to improve their final course grade; and (b) the use of student evaluations and their relationship to tenure and promote considerations for faculty.

The first finding supported hypotheses espoused by Kolkerzon (1981) and Geisinger (1980). However, college of arts and science deans and their education counterparts differed on the third reason for grade inflation. Liberal arts deans noted that increased demands on faculty time associated with student advisement and teaching assignments, as well as committee work and research, contributed to grade inflation. Deans of colleges of education indicated that a reluctance on the part of faculty to fail students contributed to inflated grades.

This study also identified general agreement among deans of liberal arts and education colleges regarding certain factors which do not contribute to grade inflation: faculty lowering grading standards; improved academic quality of students; and grades being viewed as less important than in previous years.
REFERENCES


Obstacles to Foreign Admissions Research: A Case Study

VIRGINIA GROSS AND GARY ALTHEN

MEMBERS OF AACRAO AND the National Association for Foreign Student Affairs (NAFSA) commonly urge one another to “do more research.” The assumption seems to be that more research would render more “solid information” as a basis upon which to plan and evaluate as well as increased credibility in the faculty’s eyes.

Spurred by this call for research, and lured by AACRAO’s offering of a $1,000 grant for an internationally-oriented research project, we chose a topic which we thought would be interesting, feasible, and useful. We decided to try to isolate predictors of academic success among students from Nigeria.

WHY NIGERIANS?

During the late 1970’s and early 1980’s, the number of Nigerian students studying in the United States increased dramatically. According to IIE’s Open Doors, the U.S. population of Nigerian students was 11,440 in 1975 and 19,560 in 1981. At the time U.S. colleges and universities started admitting significant numbers of Nigerian students, the assumption was that they would need the same kind of academic support and resources as other international students. 

Co-investigators were Francis Musa Boakari, The University of Iowa, and John Greisberger and Patricia Parker, Iowa State University. Others who assisted with the project were Jerald W. Dallam and David A. Frisbie, The University of Iowa. Their assistance is gratefully acknowledged.
Nigerian applicants, most had little direct experience with students from that country. By the time the study reported here was undertaken, U.S. institutions had gained considerable experience with Nigerian students. Those students' financial difficulties were all too familiar. There were less widespread knowledge about their academic performance in the U.S. It was our assumption that enough Nigerian students had come to the U.S. to make it useful to review the academic records they had established. We wanted to learn whether there were background factors common to those Nigerian students who had succeeded academically, and/or to those who had failed.

**METHOD**

Lee Wilcox (1973) said the ideal situation in which to study predictors of foreign students' academic success is to have an adequate sample of students from a single country studying in a single U.S. institution at a given level of study in a given field at a given time. To help us at least approximate that ideal, we decided to pool data from two seemingly different institutions — The University of Iowa (UI) and Iowa State University (ISU). Pooling data would, we thought, help give us that all-important sample of adequate size.

The UI and ISU both have enrollments exceeding 25,000. Both would be described in admissions parlance as “moderately selective” in their admissions requirements, at least for non-residents. ISU is a land-grant institution with emphasis on engineering, agriculture, veterinary medicine, and home economics. The UI is a liberal arts institution with a smaller engineering program and no offerings in agriculture.

Neither the UI or ISU has systematically sought Nigerian applicants. Neither had financial aid programs that would especially benefit Nigerians. Thus, the Nigerians who had chosen to attend the two schools had done so for reasons independent of anything the two schools had done. Whether the Nigerian students at the UI and ISU are representative of Nigerian students elsewhere in the U.S. is an open question.

Permanent academic records and current (in fall, 1981) transcripts of all Nigerians who had been registered at ISU or the UI since the 1974 fall term were retrieved. Records went back no further, and there were few Nigerians enrolled on either campus before 1974.
From the records, most of the information contained in a typical application file was coded. That information is normally the basis for an admissions decision. The study was intended to find whether some applicant characteristics discernible from the original applications and supporting documents were consistently, positively related with academic success.

From the transcripts, information was obtained about degrees earned (in the case of those who had earned degrees), the current GPA of those who were still enrolled at the time of the study, and the final GPA of those who left without graduating. We coded information about the backgrounds of those students who transferred to the UI or ISU from other schools so we could see how transfer students fared. To insure consistency, coding was done by one individual. Figure 1 shows the forty-two control variables which were used.

Graduate and undergraduate fields of study were classified according to the Council of Graduate Schools categories.

Optical scanning equipment was used to tally the data from the applications. The total number of responses for each variable was tabulated by hand. These tabulations provided a good deal of descriptive information about Nigerian students at the UI and ISU.

Some of that information is reported below. Even though the number of students in each cell was small, statistical correlations
were run to determine whether there were significant relationships between any of the variables and particular GPAs.

Cumulative grade-point averages were divided in the following manner:

- 0 to 1.99
- 2.00 to 2.49
- 2.50 to 2.99
- 3.00 to 3.49
- 3.50 to 4.00

“Academic success” was defined as (1) having graduated or (2) having a cumulative grade-point average (GPA) adequate to permit continuing registration. By this definition, students who do not succeed academically are those who leave voluntarily without graduating or are compelled to leave for academic reasons.

**SAMPLE**

The sample contained 247 students, 152 from ISU (75 graduate and 77 undergraduate) and 95 (45 graduate and 53 undergraduate) from the UI. Included in Figure 2 are data which describe the sample.

**Figure 2**

Distribution of Nigerian Students at The University of Iowa and Iowa State University by Sex, Age at Enrollment, Marital Status and Geographic Origin

|                | Graduates | | | Undergraduates | | | Total | | |
|----------------|-----------|----------|----------|----------------|----------|----------|----------------|----------|
|                | UI        | ISU      | No.      | %            | UI        | ISU      | No.      | %            |
| **Sex**        |           |          |          |              |           |          |          |              |
| Males          | 35        | 83       | 64       | 85            | 35        | 66       | 50       | 65            | 184       | 74        |
| Females        | 7         | 17       | 11       | 15            | 18        | 34       | 27       | 35            | 63        | 26        |
| **Age at Enrollment** | | | | | | | | |
| Under 20       | 2         | 6        | 11       | 5            | 6         | 11       | 5        | 6            | 17        | 5         |
| 20 - 25        | 15        | 36       | 33       | 44            | 11        | 21       | 28       | 36            | 87        | 35        |
| 26 - 30        | 17        | 40       | 29       | 39            | 4         | 8        | 7        | 9            | 57        | 23        |
| Over 30        |           |          |          |              |           |          |          |              |
| **Marital Status** | | | | | | | | |
| Married        | 28        | 67       | 58       | 78            | 20        | 38       | 39       | 53            | 145       | 60        |
| Single         | 14        | 33       | 16       | 22            | 33        | 62       | 35       | 47            | 98        | 40        |
| **Geographic Origin** | | | | | | | | |
| Urban          | 11        | 26       | 36       | 48            | 30        | 58       | 34       | 45            | 111       | 45        |
| Rural          | 31        | 74       | 39       | 52            | 22        | 42       | 41       | 55            | 133       | 55        |
FINDINGS

Shown in Figure 3 are data which indicate that the mean GPAs of Nigerian students at the two schools were about the same for the fall 1981 semester. As illustrated in Figure 3, the mean GPAs of Nigerian graduate and undergraduate students were below the mean GPAs of all graduate and undergraduate students.

![Figure 3](image)

It is interesting that, at each school, Nigerian undergraduates who had failed either math or English at the WASC/GCE “O Level” (and were admitted as transfers) were doing about as well as the students who had passed those subjects.

No predictors of academic success were found. By the time the sample was broken down according to each of the factors contained in the admissions dossier — WASC results, field of study, type of sponsorship, etc. — there were so few people in each cell that no useful results could be derived.

Through the entire experience, there was an ever-stronger notion that those who conduct this kind of research confront obstacles that are probably not surmountable. We turn our attention to those.

LIMITATIONS

Some easily anticipated problems emerged when data were combined from the files of both graduate and undergraduate students in different fields of study at two institutions. After completing the coding, it became apparent that the Nigerian students at each school were enrolled in a wide variety of fields. Thus, the cells by field of study were quite small. It is known that different aptitudes and skills were required to succeed in different fields and at different levels, and there were very few students in any given category. It was, therefore, impossible to generalize to the larger population.
The students may have "flunked out," dropped out on account of financial problems, or transferred to Harvard. All those cases appear the same in the written record.

In addition, there was the problem of tracking a cohort (a group of students enrolled at a given time) from initial enrollment to graduation. It could not be determined whether students who graduated did so within a "reasonable period." It was impossible to differentiate between students who earned degrees after a period of continuous enrollment from those who dropped out.

Record-keeping differences at the two schools increased coding problems. At ISU, transfer credit is usually approved after a student enrolls. Therefore, information in ISU's files did not often show the level of study for which the student was eventually accepted. At the UI, transfer credit is virtually always entered in the form of "advanced standing" on or before the student's initial enrollment. Thus, it was impossible to arrive at a standard period of time that was "reasonable" for completing degree requirements.

There was a similar problem with graduate students whose degree objective changed, after enrollment, from master's to Ph.D. The application in the student's file still showed the master's degree as the objective. Often, for graduate students, it was impossible to determine whether from admissions and registrar's records the number of courses a student might have been required to add to the minimum curriculum for the degree desired. For example, a graduate student may prove to need undergraduate mathematics or computer science courses in order to carry out dissertation research. Undergraduate students who enrolled for short term, non-degree coursework or who completed second majors provided similar problems.

IMPLICATIONS

At the outset of our study, we were mindful of warnings Wilcox presented in his paper at the 1973 annual AACRAO meeting. He described the conditions that need to be met in order to get results helpful in predicting academic success. Two seemingly similar institutions were used in order to enlarge the sample size. A number of problems related to record-keeping and the differences that do exist between the two schools were introduced as a result. Even without those differences, the sample, when divided into the necessary cells, was far, far too small.
There is question whether this type of study can, at present, be done at all. Can researchers find a large enough group from a single country enrolled in a single level and field of study? What about controls for such important factors as level of English proficiency and reliability of financial support? What about additional factors for which controls are even more difficult to apply? What about the effects of sex-role stereotyping? Margolis (1979) provides examples of “vagaries” that preordain the futures of Nigerian students. Among them he cites the lack of laboratory classes in secondary schools without electricity and/or running water and the staffing of grammar schools with teachers who may not hold university degrees.

Given the difficulties in pooling data from two institutions that are similar in many ways, the results of this study raise significant questions about the degree to which admissions officers can accept general placement recommendations. If performance cannot be assessed meaningfully with data pooled by two schools of approximately equal selectivity within the same state, it seems that extreme caution should be exercised in using published placement recommendations except for the most general guidance.

Perhaps at some future time interinstitutional cooperation will yield samples large enough and homogeneous enough to permit meaningful foreign student research. Whether or not there can be found enough similar schools with similar record-keeping practices remains to be seen.

REFERENCES
The Black Freshman Network

JERRY J. LEWIS

INTRODUCTION

SOME AUTHORS HAVE concluded that the key factor in retention is student involvement in campus activities (Pounds & Lewis, 1984). Additionally, students who get involved in the life of the institution are more likely to persist there. The literature supports the premise that students who establish close relationships with other persons show greater persistence in college. In one study, the conclusion was reached that the important factor was a caring atmosphere or specific individuals who cared about the students (Pounds & Lewis, 1984).

While a number of student retention programs have been described in the literature (e.g., Lenning, et al., 1980; Noel, 1976; Simmons, et al., 1978; Walton, 1978), nearly all have taken place at traditional residential campuses and almost none have focused on black, non-residential students. Many of the activities successful at traditional institutions would not attract urban commuter students who splinter their time between jobs, family, and school.

This paper will describe the Black Freshman Network (BFN). The BFN is the minority retention program at Georgia State University which is a predominantly white non-residential, state-supported institution located within an hour’s commuting distance of two million citizens in the Atlanta area. This urban university, which operates on the quarter system, offers degrees in arts and sciences, business, education, health sciences, law and public and urban affairs. In the 1983 Fall Quarter, enrollment was 21,512. Approximately 400 were Black freshmen.
PROGRAM DESCRIPTION

The BFN is a multifaceted outreach/retention program. Its goals are to help Black freshmen:

1. make the emotional transition to college;
2. understand requirements, rules, and regulations;
3. make the social transition to college life;
4. make the intellectual transition to college;
5. set academic career and personal goals, and
6. seek appropriate academic advising (c.f. Panos & Astin, 1968).

To accomplish these goals, the program brings together faculty, staff, and students as partners in improving the freshman experience for minorities. This elaborate campus-wide network consists of one full-time director, forty-five volunteer faculty and professional staff who serve either as faculty mentors (professors provide academic and career information to black freshmen in small group meetings) or contact persons, and twenty student peer advisors.

Students drop out of college for a wide variety of reasons, most of them non-academic; hence, the BFN addresses social and personal needs as well as academic needs. All faculty, professional staff, and student peer advisors are selected by the director. These carefully selected individuals participate in an orientation seminar. As a result of campuswide participation in these activities it is believed that a total campus atmosphere of warmth, friendliness, and sincere caring can be created.

The program volunteers (faculty, staff, and students) provide academic and social support for black freshmen by referring them to appropriate campus personnel or resources whenever students seeking assistance have academic, financial, personal, or social problems. Additionally, through the BFN, workshops have been conducted by professional staff on financial aid concerns, career planning, and academic advising.

The peer advisors are responsible for facilitating quarterly support group meetings with their advisees, conducting telephone information sharing, and attending quarterly staff meetings called by the director. The director, therefore, carefully selects those who will work in the program. Peer advisors for the BFN are undergraduate and graduate students ranging in age from 19 to 29, married and single, black as well as white. Selection is based upon their academic standing and experience in working with people, prefer-
ably in a helping capacity such as tutoring or serving as a “Big Sister” or a “Big Brother.” Enthusiasm about the purpose of the program and flexibility of both personal and academic schedules are other important elements. Experience has shown that mainstream student leaders are not necessarily the most suitable peer advisors. Although these students are dedicated and enthusiastic, they are often “over-extended” — busy with responsibilities such as full-time jobs, heavy academic course loads, or leadership roles in other campus organizations.

Each quarter the BFN works with approximately 400 black freshmen whose average age is twenty. The Office of the Registrar provides the director with a list of names and telephone numbers for those students registered during the current quarter. The list is then subdivided into groups of ten or twenty. Each peer advisor, who is assigned to one or more groups, explains the purpose of the program. The first six months of enrollment are especially critical for new students (Pounds & Lewis, 1984). Many impressions and decisions are made early in the academic experience; therefore, every effort is made to get students immediately involved in the institution.

Peer advisors take the initiative in promoting and providing services for the students. They contact the students three to five times per quarter to assess their needs or problems and to provide assistance or referrals, as necessary. Often the peer advisors make referrals or advise freshmen over the telephone. In some cases, they not only refer freshmen to a particular person or office, but also call and make appointments for them. After making all the arrangements for the freshmen, the students are telephoned to inform them of the arrangements.

It should be noted that the peer advisors do not provide personal counseling. Nor do they officially advise students on what courses to take — the University has a professional staff to provide these services. Rather, peer advisors provide their fellow students with insight and information based on current experience, and they improve the relationship between student and institution. Often the contact made by the peer advisor simply communicates to the new student that “someone is there, if he or she is needed” (Pounds & Lewis, 1984).

The formal meetings conducted by the faculty mentors tend to focus on academically oriented topics such as pre-registration in-
formation, degree requirements, curriculum, or midterm progress assessments. These meetings can strengthen the student's relationship with faculty/staff and provide a personalized and individualized way to relate the educational program to the student's values, personal life goals, and skills (Pounds & Lewis, 1984). Informal meetings tend to focus on issues such as developing relationships, establishing goals, or other concerns of particular interest to freshmen.

Faculty/student interactions outside the classroom are critical to student retention. Non-faculty professional staff can also play an important role in improving retention, if they are made aware of their potential impact and are given appropriate orientation for serving in such a role (Pounds and Lewis, 1984). The program has provided a vehicle for faculty/staff interaction that would not have been possible otherwise.

In addition to the group meetings, the BFN sponsors social activities such as hot chocolate socials and receptions. Faculty, staff and students are invited to participate in these activities. Additionally, these social/extracurricular activities encourage informal contact between black freshmen and black faculty and staff, who are important as role models.

In its first year of operation, the BFN enjoyed campuswide support. This support was evidenced by the large number of faculty and staff personnel who have volunteered to be a part of the network. The motivation for these volunteers is altruistic—the knowledge that they can make a difference in a student's life and in the way he or she feels about higher education (Pounds & Lewis, 1984). Faculty and staff do not receive any compensation or time off for their participation in the program.

**Student Perceptions**

At the end of the 1983 Fall Quarter, telephone interviews were conducted among the black freshmen to poll perceived need and effectiveness of the program. Each interview took approximately twenty-five minutes to conduct and included several open-ended questions (see Appendix A for an example of the questions.)

The interviews were conducted by five peer advisors who were required to attend a one hour orientation session before conducting their interviews. During the session, the director (1) explained
the purpose of the survey and procedures the peer advisors were to follow when conducting the interviews, (2) discussed and clarified, when necessary, the interview questions, and (3) distributed lists of freshman names from which peer advisors were to randomly select ten freshmen willing to undergo the complete interview. Only ten interviews per peer advisor were required because of the number of questions to be asked and the amount of time it would require to conduct each interview. Thus, only fifty freshmen were interviewed.

Although each freshman was asked several questions, the most important were (a) “Do you think the program has a positive image among students? Why? Why not?” and (b) “Do you think it is necessary to have a support program for black freshmen at Georgia State? Why? Why not?” Both were important because some researchers (e.g., Moore, 1976) suggest that black students are often reluctant to use support programs because they feel stigmatized by them. Therefore, it was important to the future of the program to determine student perceptions of the Network. If, indeed, they felt stigmatized, the continued success of the program was unlikely.

The interviews revealed the following. First, all the freshmen responded “yes” when asked if they thought the program was needed. Typical comments included (1) “yes ... freshmen need guidance,” (2) “yes ... because people feel alone,” (3) “yes ... some students really need help immediately,” and (4) “yes ... because blacks are in an all white environment.” Even freshmen who had not used the services provided by the Network at the time of the interviews indicated that the program was important as a program on campus with which they could identify or to which they could turn for help. For example, when asked, “Under what circumstances do you see yourself using our services?”, typical responses from these freshmen were (1) “... to get more information about financial aid or career planning,” (2) “... to get help with advisement;” and (3) “... if I am in need of help.”

Second, the majority (68%) of the freshmen answered “yes” when asked if they thought the program had a positive image. Typical comments included (1) “yes ... it helps students with their problems,” (2) “yes ... it helps black students adjust,” (3) “yes ... it offers black students a chance to get to know each other,” and (4) “yes ... it is trying to reach out and help.” Of the ones who did not answer “yes,” only three actually answered “no.” The others did not
answer “yes” or “no” because they were only vaguely familiar with the program. (This finding implied that our advertising efforts needed improvement.)

The results of the telephone interviews were encouraging. The majority of students openly expressed a need for the program. They felt it had a positive image. Hence, it appeared that the program had created for the black freshmen — without making them feel stigmatized — a caring, supportive atmosphere at the University.

CONCLUSION

This atmosphere was created by increasing faculty and staff awareness of black freshman needs and community awareness of the program and of the University's commitment to black students. Hopefully, the Black Freshman Network, which seeks to improve public relations and institutional morale, will, above all, fulfill its promise to the University — in the attraction and retention of black students (Pounds & Lewis, 1984).

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Optimizing Student-Institution Fit: An Interactionist Perspective

TERRY E. WILLIAMS

Many in higher education administration today would agree that chief admissions officers are emerging as key administrators on the campus. Ironically, as the problems and intense pressures associated with the recruitment, selection, and admission of new students have risen in the past few years, the opportunities for admissions officers to have significantly greater influence in institutional policy formation and long-range planning have also increased. Many admissions deans and directors are seeing their job descriptions redefined and expanded with new responsibilities. Increasingly, they are reporting directly to presidents and becoming key members of and advisers to presidential cabinets.

In order to be effective in their new leadership role on the campus, many admissions officers must increase their knowledge not only about higher education generally, but also in the area of enrollment management. Hossler (1984) posited that enrollment management and its emerging theory- and research-base constitute a valuable new area of specialized knowledge, and thus study, for the admissions officer. He has defined enrollment management as a "process, or activity, that influences the size, the shape, and the characteristics of a student body by directing institutional efforts in marketing, recruitment, and admissions as well as pricing and financial aid. In addition, the process exerts a significant influence on academic advising, the institutional research agenda, orientation, and retention studies ..." (p. 6).
Because enrollment management involves much more than the process of attracting new students to the campus, a great deal of attention must also be focused on ways to retain students after they arrive. It is very important that admissions officers not only assist students in selecting a college which can best meet their needs, expectations and interests, they must also assist the institution in carefully monitoring its own environment such that the degree of “fit” between student and campus might be optimized.

Some admissions officers may not view the concept of “student-institution fit” as new since for years they have been trying to fit, or match, student characteristics to institutional characteristics, believing a good match will result in satisfied graduates. What is new, however, is a need to approach systematically this critical matching of student and campus using a carefully conceived and theoretically-sound process that will enable the campus enrollment management team to take positive action to increase student-campus fit.

Clarifying fit. A growing body of knowledge that is both research- and theory-based strongly suggests that the degree of congruency, or fit, between a variety of student characteristics and the ability of the institution to respond adequately to those characteristics could lead to increased student satisfaction, academic achievement, and personal growth (Walsh 1978; Huebner 1980; Lenning, Sauer, and Beal 1980). Since all of these conditions are likely to result in student retention, these findings should motivate enrollment managers to examine carefully the nature of the fit between student and institution.

In describing student-institution fit, one must understand three important factors: (1) student characteristics, (2) institutional characteristics, and (3) effects of the interaction between the student and the institution. Student characteristics include the personal attributes, needs, abilities, expectations, interests, and values brought to the campus. Institutional characteristics include a complex array of physical, academic, social and even psychological attributes that make up the campus environment.

Finally, the third component of fit includes the physical, cognitive, and affective interactions between students and their institution. When students’ needs, goals, interests, and expectations are adequately met by various campus conditions, then, from the student’s perspective, a high degree of fit exists. Likewise, when stu-
dent academic and social abilities mesh well with institutional re-
requirements, then, from the institutional perspective, fit between
student and institution also exists.

Several authors have written about the concept of matching stu-
dents with institutions of higher education in an effort to sensitize
campus leaders to issues surrounding student-institution fit. For
example, Creager (1968) discussed fit by stating that the principal
objective of matching students with colleges is to maximize educa-
tional objectives related to student persistence in college, motiva-
tion for graduate school, realistic career choice, high academic per-
formance, and even mental health (p. 312). Painter and Painter
(1982) indicated that “the right choice will match the student with
the college that fits personal abilities and personality, with under-
standable consequences of feelings of gratification. The wrong
choice will cause frustration and angry blame-fixing by the student
and college” (p. 86).

Pace (1980) has also provided generalizations that are especially
helpful to an understanding of student-institution fit: (1) students
entering college with highly unrealistic expectations about the envi-
ronment are more likely to have problems adjusting and are more
likely to withdraw than are students who enter with realistic goals
and expectations, (2) students who perceive their campus environ-
ment to be friendly, congenial, and supportive are more likely to be
satisfied with the college, (3) student interaction with the scholastic
press of the institution is directly related to goals for graduate
study, and (4) when congruency, or fit, exists between student per-
sonality characteristics and institutional characteristics, student ob-
jectives are more likely to be achieved (pp. 91-92).

A traditional view of fit. The view long held by admissions officers
and other key enrollment planners regarding student-institution
fit has usually taken into consideration only student characteristics
and institutional characteristics. In the past, in order to attract new
students who seemed to match well with the institution, much at-
tention has been focused on identifying demographic characteris-
tics of students who persist to graduation. These characteristics of-
tentimes include high school g.p.a. and national test scores and to a
lesser extent, parents’ income, occupation, and location of resi-
dence. These characteristics of graduates are assumed to be a sig-
nificant part of the formula for successful student retention on the
campus. However, matching students with institution has been an
incomplete process and has contributed to the notion that for any given institution there exists a small, select group of students who will match best with the institution. Or, viewed another way, this perspective implies that for the student, there may be only one or two academic institutions that would provide the best learning conditions.

A careful analysis of this traditional approach reveals that it has not met with overwhelming success; the average graduation rates after even five years in an institution range from only 53 percent at four-year public institutions to 63 percent at four-year, private independent institutions (Beal and Noel 1980). These retention statistics plainly reveal that many colleges and universities are still losing large numbers of students — even after these students have been painstakingly identified, recruited, admitted, and enrolled. Although this approach has served higher education well in years past when applicant pools were more than adequate to maintain enrollment needs, to continue this approach to student-institution fit will not serve higher education well either in the current era or in the years ahead.

A comprehensive perspective to understanding fit. A much broader approach to understanding the nature of student-institution fit is now needed. This new perspective would necessarily include not only (1) the traditional focus on student characteristics and (2) institutional characteristics but also (3) the effects of the interaction of student with the campus environment. Understanding this third element — how students interact with the institution and how this interaction is directly linked to student retention — is an essential component of student-institution fit that must not be overlooked.

This broadened perspective to understanding fit is directly related to a theoretical concept known as person-environment interaction. Even though the application of this concept to higher education has been the focus of attention recently in the professional literature, the concept itself is not new. Theorists and researchers, especially from psychology and sociology, as early as 1924, have explored the relationships between individuals and their environments. Kantor (1924), Lewin (1936), and Murray (1938) each were early contributors to the theoretical foundation for interactionism. The importance in understanding factors contributing to person-environment interaction in higher education becomes clear if one assumes that all aspects of behavior — what one knows, feels and
does — cannot occur in a vacuum.

For example, not only do students bring their own physical, social and psychological characteristics into the campus environment, but the campus in which they live will necessarily have impact and influence on their behavior. Thus, the interactionist perspective would suggest that the student and the campus shape each other. Readers interested in an introduction to the theoretical foundation should turn to Walsh (1973, 1975, 1978), Huebner (1980), and Williams (1984) who provide reviews and critiques of selected theories that hold particular value for enrollment management.

As was stated earlier, many students who are initially attracted to a particular campus and enroll, often end up leaving while expressing varying degrees of dissatisfaction with the campus environment. Again, these are frequently the same students whose personal and family characteristics matched well with campus predictors for academic success at the institution. These students cite feelings of being in the wrong place and of being mismatched with campus expectations or norms. Some of the student-reported factors resulting in these mismatches include: (1) lack of fit between students’ prior expectations regarding campus life and what they themselves experience at the institution; (2) few opportunities to develop warm friendships, especially with peers of similar background; (3) lack of fit between student ability and academic standards of the college resulting in student-reported low grades, professorial contempt, and course content that is hard to understand; and (4) the unavailability of specific career-related courses, adequate recreational facilities, and student support services (Painter and Painter 1982, pp. 88-92).

These mismatches are usually manifested through academic, social, and personal adjustment problems that students experience on the campus. Unfortunately, students with adjustment or other types of problems have been viewed as being deficient in some manner (Banning and McKinley 1980). This perspective has evolved from a traditional institutional reliance on a counseling or medical model that views students as clients or patients. This approach has, until recently, turned attention away from both the campus environment and the interactive relationship between students and their campus. When students are viewed as clients, campus environments are rarely seen as deficient or in need of intervention (p. 40). If institutions always assume that dissatisfied
students are deficient in some way, institutional efforts may at times be aimed at helping the student adjust or accommodate to a deficient campus environment (Banning and Kaiser 1974).

A plan for optimizing fit. The admissions officer must necessarily serve in a key leadership role at any institution adopting a genuine commitment to enrollment management. However, because effective enrollment management requires meaningful participation by all major campus constituencies (e.g., academic affairs, student affairs, and business affairs), the admissions officer must not agree to take on full responsibility for the campus enrollment management effort. Because a wide variety of “turfs” outside the control of the admissions officer must be involved, it would be unfair and even pointless to have the admissions officer responsible for programs and activities institution-wide (Kemerer, 1984).

Kemerer, Baldridge, and Green (1982) have described four models for organizing and coordinating enrollment management activities on the campus. The four models can be placed on a continuum according to the amount of reorganization each requires. For example, on one end lies the enrollment management committee that requires no reorganization. Next comes an enrollment management coordinator who serves as a staff officer and coordinates the activities of a committee or team. A third model, the Matrix System, goes a step further by grouping together independent offices into various functional categories such as a marketing group.

The final model involves major reorganization and includes establishing an enrollment management division on the campus. Divisional offices might include admissions, financial aid, registration and records, retention programs, etc. Since it is not the intent of this article to describe the important organizational aspects of planning for campus-wide enrollment management, readers interested in a detailed review of these four approaches should consult Kemerer, Baldridge, and Green’s 1982 book. It is important, however, to reiterate that the admissions officer does serve a very important role in each of the models described above.

Regardless of which organizing model is utilized on the campus, the concept of student-institution fit must be addressed. For example, those on the campus who share responsibility for enrollment management have as a major task the identification of mismatches that exist between institution and student. The committee, team, or coordinator may turn to the admissions staff or the institutional
research office or both for data about the expectations, attitudes, and values of entering students. To illustrate, the committee may want to know if newly admitted students, in part, selected the institution because they expect to have a significant amount of out-of-classroom contact with faculty and then experience disappointment because that expectation is not realized. Or, the committee may seek information regarding whether entering students expect to be socially active within the institution’s fraternity and sorority system and soon discover after arrival on campus that only a small, select group is pledged. What these examples illustrate is that students, in part, may select an institution based upon unrealistic expectations about campus life. Certainly, an enrollment management team will look carefully at how students acquire these expectations and the role which the admissions office serves in this regard.

After student-campus mismatches are identified, the institution has three possible courses of action. First, institutional leaders could assume that unfulfilled expectations are a normal part of life and thus they could decide that nothing needs be done. Second, they could communicate to students more clearly prior to enrollment or during orientation what they can realistically expect in terms of faculty contact and Greek life. Finally, after deciding that students’ expectations are legitimate, they could intervene in the environment to try to turn these expectations into reality. If the institution chooses either the second or the third course of action, then it would be clearly acting to increase its fit with students. The first option merely maintains the status quo, the mismatch between student and campus.

Enrollment management teams wanting to increase levels of fit between campus and student need to perform two related sets of tasks: (1) the total campus environment must be carefully and systematically defined and then assessed; and (2) the data gathered must be used as the basis for redesigning the campus environment in those cases where student-institution mismatches occur.

In undertaking the first set of tasks, one can turn to the professional literature for guidance. There is no need to “reinvent the wheel” when desiring to conceptualize the campus environment. In fact, in recent years many researchers have proposed a variety of ways to conceptualize and define campus environments (Banning and McKinley 1980; Moos 1974; Astin 1968; Blocher 1974, 1978). Even though each approach is unique, each in some way addresses
four broad elements that comprise the campus environment: the physical, social/cultural, academic/intellectual, and the psychological domain. Each domain has characteristics which influence fit between student and institution.

Once enrollment managers determine what ways to best define their own campus environment, they next need to devise a plan for its systematic assessment. Generally, four types of measures are available for conducting environmental assessment. These include demographic, perceptual, behavioral, and multimethod approaches. Readers desiring more specific information about these assessment procedures are invited to review the work of Huebner (1980).

An interactionist model. Defining and assessing the campus environment enable enrollment managers to proceed to the most important step in enhancing student-campus fit, that of intervention. Since 1975, a few intervention models have been developed that view the student, the campus, and student-institution interaction as integral parts of an intervention process. The development of one of these, the Ecosystem Model, has particular value to enrollment managers. The model was based on certain assumptions about students and campus environments (Kaiser 1978, p. 26): (1) that campus environments include all physical, chemical, biological, and social stimuli that impinge upon students; (2) that students shape their environment and at the same time are shaped by it; (3) that campus environments facilitate and inhibit a wide spectrum of student behavior; and (4) that successful environmental design is dependent upon full participation of all campus constituencies.

The Ecosystem model outlines a process that allows the institution to: (1) set its goals based upon intended outcomes for students; (2) design programs and activities that will assist in fulfilling those goals (the intervention); and (3) measure how effectively the goals are being met. The process includes seven steps: Valuing, Goal Setting, Programming, Fitting, Mapping, Observing, and Recycling. Each of these steps is described below utilizing an example about faculty-student contact, a variable researchers have linked closely to student persistence.

1. Valuing. A wide variety of values considered desirable for the campus are selected through consensus exercises (i.e., values clarification). All campus constituencies need to be involved. For example, after a values clarification exercise the following three value statements concerning students are identified: (1) development of
skills which enhance career decision-making in students is valued, (2) development of leadership skills among freshmen is valued, and (3) involvement between faculty and freshmen outside the classroom is valued.

2. **Goal Setting.** The list of institutional values is prioritized and one or more is selected for translation into measurable, programmatic goal statements. Using the three values identified above, the value statement about faculty-student relations is selected as the top priority. Thus, the following goal statement might be agreed upon: “The institution will systematically provide a variety of opportunities for freshmen to have meaningful involvement with faculty outside the classroom during the next academic year.”

3. **Programming.** The general goal statements are next translated into observable and tangible student programs and activities. For example, programs to address the above goal would be developed as follows: a) one or more freshmen will be appointed/elected to campus committees with faculty and student representation, b) a systematic program of faculty involvement with students in the residence halls will be developed, c) a plan will be developed to encourage several faculty to invite small groups of freshmen into their homes for dinner and topical discussion, d) student clubs and organizations will be strongly encouraged to invite faculty participation as advisers and in special events, e) the institution will develop plans for rewarding faculty involvement with students outside the classroom, and f) significant faculty involvement in new student orientation will be facilitated.

4. **Fitting.** Programs and activities identified above are fitted to meet the needs and expectations of students. These needs may require special programs at the macrolevel (campus wide), the microlevel (selected groups), or life-space level (for the individual). For example, a macrolevel program would include faculty involvement in orientation for all freshmen. A microlevel program would consist of faculty involvement with small groups of freshmen in faculty homes. Finally, where needed, a lifespace-level program would include the appointment of individual freshmen to campus committees.

5. **Mapping.** Student perceptions of the campus environment are measured (using a variety of instruments) and compared with goal statements established in Step 2. A special focus is placed on student-reported stimuli in the environment that evoke the meas-
ured perceptions. For example, do freshmen at the end of the Fall term perceive that several opportunities exist for genuine interaction with faculty outside the classroom? Did freshmen expect to have a significant level of contact with faculty prior to matriculation? Do freshmen now perceive any institutional commitment (value) to provide these opportunities? Do the students report satisfying experiences with faculty?

6. Observing. Student behavior is observed, measured, and compared with perceptions identified in Step 5. For example, how many freshmen actually have contact outside the classroom with faculty? In what specific settings are freshmen meeting with faculty? What are the demographic characteristics of those freshmen who meet frequently with faculty? Who are least satisfied and most satisfied?

At this stage in the process, if the ecosystem design is working, high correspondence between behavior (Step 6), perceptions (Step 5), and goals (Step 2) should exist.

7. Recycling. The final step consists of a recycling of all data collected in Steps 1 to 6 back to Step 1 for further review and perhaps clarification of institutional values previously identified. At this point the ecosystem process begins again.

This comprehensive and systematic process for assessing and intervening in the campus environment provides a unique interactionist perspective which takes into account the student, the environment, and their interaction. Again, regardless of which organizational model for enrollment management is used on a campus, this ecosystem model can be put to effective use. The comprehensiveness of the model mandates that all campus constituencies be integrally involved. Thus, like the concept of enrollment management itself, this model requires full support from the highest levels of the institution (Kaiser 1978).

Conclusion. By way of the preceding discussion it has been shown that the concept of student-institution fit includes much more than institutional searches for prospective students with predetermined characteristics that are based on the characteristics of graduates. Instead, what is needed is a broad interactionist perspective regarding matching students and institutions. The complex nature of student-institution fit must also be carefully linked to an institution-wide student retention plan. This plan must identify not
only where student-environment mismatches are occurring but why they are occurring.

Many times students who are carefully recruited to the campus have unrealistic expectations of what they will experience while on the campus or believe that they do not have the abilities needed to cope effectively with the campus environment. A good plan would respond to this problem in two ways.

First, there is much that can be communicated to prospective students and their parents that will temper their unrealistic expectations with reality. It is vital that the image projected by the institution to its external constituencies be an accurate one. All publications should be thoroughly reviewed for misleading information and admissions representatives should be armed with the most recent data about the campus — its academic, social, physical, and psychological environments.

Secondly, and perhaps more importantly, a good plan also responds to the mismatches already existing on the campus. Again, one should not assume that student dissatisfaction resulting from adjustment or other types of problems always represents student deficiencies of some sort. Instead, admissions officers and their enrollment management colleagues should look critically at the campus environment to ascertain what negative impact it may be having on these students.

A careful assessment of the campus environment will lead to more informed decisions regarding ways to intervene in the campus environment such that the mismatches between students and campus can be effectively reduced. A campus enrollment management team must take seriously this broad perspective for understanding student-institution fit. It must be willing to use the theory base and environmental assessment tools in designing a comprehensive plan of action that will succeed in increasing levels of fit between students and campus.

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Editor's Comment

Included with this edition of *COLLEGE AND UNIVERSITIES* is an index to the articles and papers which have been included in volume 60 of this journal. The volume index has often been included in Summer issue of *COLLEGE AND UNIVERSITIES* that did not happen during 1985.

The omission was most likely the fault of the editor. The tardy inclusion of those materials in this issue is a largely unsatisfactory solution. Suffice it to say, that problem will not be repeated.

The current edition of the index is a simplified version of its predecessors. It is hoped that this type of index will be useful to *COLLEGE AND UNIVERSITIES* readers. Persons who are "stumped" by this index or others are encouraged to use the *Education Index* in which *COLLEGE AND UNIVERSITIES* and many other journals are indexed fully.

The input of association members and other readers is welcome. Please do not hesitate to "have your say."

One of the best methods to have input upon *COLLEGE AND UNIVERSITIES* involves submitting a paper for consideration. The work of all members of the academic community is welcome. Receiving special attention will be the work of registrars and admission officers. After all, who knows our profession better.

James C. Blackburn
Editor
BOOK REVIEW

Applied Ethics in Student Services, Harry J. Canon, Robert D. Brown, Editors, from the New Directions for Student Services, Number 30, San Francisco, Jossey-Bass, 106 pp., $8.95.

A resurgence of interest with ethical issues seems to be emerging not only in higher education, but in society at large. Along with this, there is a growing awareness of quality issues in higher education. The convergence of quality and ethical issues makes it appropriate to reassess current practices and determine whether or not they meet ethical and quality standards. The authors of the work reviewed here have addressed the application of ethics within the practice of student personnel. The goals of this number in the series New Directions for Student Services are to:

... encourage examination of the ethical quality of practices in the student services professions, to use professional ethical codes as reference points, to understand how individual codes differ from one another and why those differences may have arisen, to explore the application of ethical principles to ethical decision making, to apply some role definitions and see how their descriptors affect our meeting of ethical responsibilities to one another, and, in general, to elevate our inquiry into ethical matters to levels above the minima required by laws and our formal codes. (p. 1)

In the introductory essay, Harry J. Cannon presents 27 case studies which serve as a reference point for further discussion throughout the book. These very realistic situations offer an opportunity for the professional and the student in the student personnel field to reflect upon their own daily practice in a challenging manner. The case study situations are written in such a manner as to show values in conflict and force the reader/student to solve an ethical dilemma. By way of the case studies, exposures are provided to situations which we may not have considered as having ethical
In an essay, Karen Strohm Kitcherner distinguishes professional rules and codes of ethics, ethical principles, and ethical theories with each being understood at a higher level. Ethical codes have limitations and often offer contradictory advice. Ethical principles provide a level of justification where the codes are ambiguous and provide a rationale for what the codes include. Unfortunately, for the student of student personnel work, there is no discussion of the ethical theories, however, several references are made.

In the same essay, Kitcherner outlines five ethical principles upon which professional standards can be built. They are respecting autonomy, doing no harm, benefiting others, being just and being faithful. Offering an alternative to the dilemma of choosing between an absolutism on one hand and a subjectivism on the other, she states that “Ethical principles may be considered as prima facie binding.” This means that ethical principles “establish an obligation unless there are circumstances or other obligations which are stronger” (p. 27).

In an essay entitled “Creating an Ethical Community” Robert Brown makes a case that the special mission of student affairs is to be the conscience of the campus. He argues that to accomplish this, student affairs professionals must focus on the entire community rather than merely on the “immediate physical or professional communities” (p. 70). He argues that the normative behavior desired by professions is founded on the nature of this community. Student affairs professionals are in a privileged position with a broader perspective and can, therefore, be helpful in resolving conflicts when the values of various constituencies come into conflict. He proposes that student affairs professionals plan ethical agenda for their campus which call attention to the following areas: peace issues, vocation as calling, developmental programs, developmental progress for all and theory and research.

In her essay, LuAnn Krager develops a matrix for student affairs professionals as administrators and as educators. Examples of behavior conforming to each of the ethical principles are provided for each of the roles played. Although the examples of behavior are vague and the presentation somewhat confusing, the reader is reminded that the day-to-day activities of the professional have ethical implications.
Roger B. Winston, Jr. and John C. Dagley have provided an essay in which are presented the purpose and use of statements of professional ethics. They describe well student affairs as a profession in a bureaucracy and the conflicts this situation presents. It is precisely these conflicts which have given rise to the formation of statements of ethics by different professional organizations.

There is some reluctance on the part(s) of student personnel professionals to discuss the role of ethics in practice. Some of the "myths" associated with this reluctance are discounted in the concluding essay by Canon and Brown. The hope of the authors is that their efforts might instill an awareness that ethical practice can be ignored only to the detriment of the profession.

The essays are helpful in reinforcing the notion that every action/decision made by student affairs professionals is value laden and has ethical ramifications for the student affairs professional. The book is also useful for professional preparation programs as an introduction to ethical considerations within student affairs.

Robert P. Merz
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