DOCUMENT RESUME

ED 360 938 HE 026 677

AUTHOR Sanders, Liz; Chan, Susy
TITLE Student Satisfaction Surveys: Measurements and Utilization Issues. AIR 1993 Annual Forum Paper.
PUB DATE May 93
NOTE 20p.; Paper presented at the Annual Forum of the Association for Institutional Research (33rd, Chicago, IL, May 16-19, 1993).
PUB TYPE Reports - Descriptive (141) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS College Students; Data Analysis; Data Collection; Educational Environment; Higher Education; *Information Utilization; *Institutional Research; *Research Methodology; Student Attitudes; Student College Relationship; Student Educational Objectives; Student Needs; *Surveys
IDENTIFIERS *AIR Forum; Cooperative Institutional Research Program; *De Paul University IL; Diversity (Student); Total Quality Management

ABSTRACT

Student satisfaction surveys assess satisfaction with various facets of the university and includes key sets of questions on programs and services, university learning and social environment, university mission and values, educational preparation, transfer intent, general satisfaction, attitudes toward coursework, and student demographic information. Efforts at DePaul University (Illinois) in meeting student expectations of the educational experience are discussed including: (1) the methodology for successfully conducting student satisfaction surveys, (2) the implications of these surveys for institutional research, and (3) the strategies for maximizing the use of student satisfaction data. Specific topics discussed include DePaul University's experiences and efforts in survey development, sample selection, survey preparation and mailing, and data processing. Areas for continued improvement in conducting and utilizing these types of surveys are also examined. (Contains five references.) (GLR)

Student Satisfaction Surveys: Measurement and Utilization Issues

Liz Sanders
Associate Director of
Institutional Planning and Research

Susy Chan
Vice President for University
Planning and Research

DePaul University
25 E. Jackson Blvd.
Chicago, IL 60604

(312) 362-8790

Running Head: STUDENT SATISFACTION

Paper presented at the 1993 AIR Forum, May 16-19, Chicago Illinois.

for Management Research, Policy Analysis, and Planning

This paper was presented at the Thirty-Third Annual Forum of the Association for Institutional Research held at the Chicago Marriott Downtown, Chicago, Illinois, May 16-19, 1993. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of Forum Papers.

Jean Endo
Chair and Editor
Forum Publications
Editorial Advisory Committee

Abstract

Like institutions nationwide, DePaul currently is undergoing a transformation driven in part by the increasing diversification of its student body. As a result, this institution is challenged to meet higher student expectations of the educational experience. To meet these challenges, this institution annually conducts a student satisfaction survey assessing satisfaction with various facets of the university including student programs and services, environment and career preparation. This proposal will discuss the methodology for successfully conducting student satisfaction surveys, implications of these surveys for institutional research, and strategies for maximizing the use of student satisfaction data. Areas for continued improvement in conducting and utilizing student satisfaction surveys will also be discussed.

Student Satisfaction Surveys: Measurement and Utilization Issues

To support the strategic planning process which strives to enhance quality and strengthen customer satisfaction, the Office of Institutional Planning and Research at DePaul University annually conducts a student satisfaction survey. Originally developed in 1990 by the Office of Student Affairs, the Office of Institutional Planning and Research has, since 1991, modified and administered the Student Satisfaction Survey in order to address three rising university initiatives.

First, the survey was developed in anticipation of university adoption of a *Total Quality Management (TQM) framework*, a more customer-oriented management style. Although the TQM initiative has currently not been adopted, there is a strong movement toward quality assurance and business process re-engineering (PRE). Second, DePaul, like other institutions, is under pressure to adopt a more *indicator-based planning and management process* to meet both state and national initiatives. At the state level, an indicator-based planning process will address the Illinois Board of Higher Education's Priorities, Quality and Productivity (PQP) initiative which focuses on the clarification of institutional priorities in order to improve quality and productivity. At the national level, the development of student outcome indicators anticipates the North Central Accreditation process which will begin in 1996. Third, attention to student needs is critical due to the *rapid expansion* of students and faculty at DePaul in recent years, not only at the structural level but in the services provided. This expansion has resulted in some dissatisfaction with the quality of student services.

It is in this context that the Student Satisfaction Survey was developed. The survey assesses student satisfaction with various facets of the university and includes key sets of questions focusing on programs and services, university learning and social environment, university mission and values, educational preparation, transfer intent, general satisfaction, attitudes toward coursework and student demographic information. The following sections discuss the conceptual framework, the selection of measures, the methodology for conducting student satisfaction surveys, the implications of these surveys for institutional research, and strategies for maximizing the use of student satisfaction data. Continued improvement in conducting and utilizing student satisfaction surveys will also be discussed.

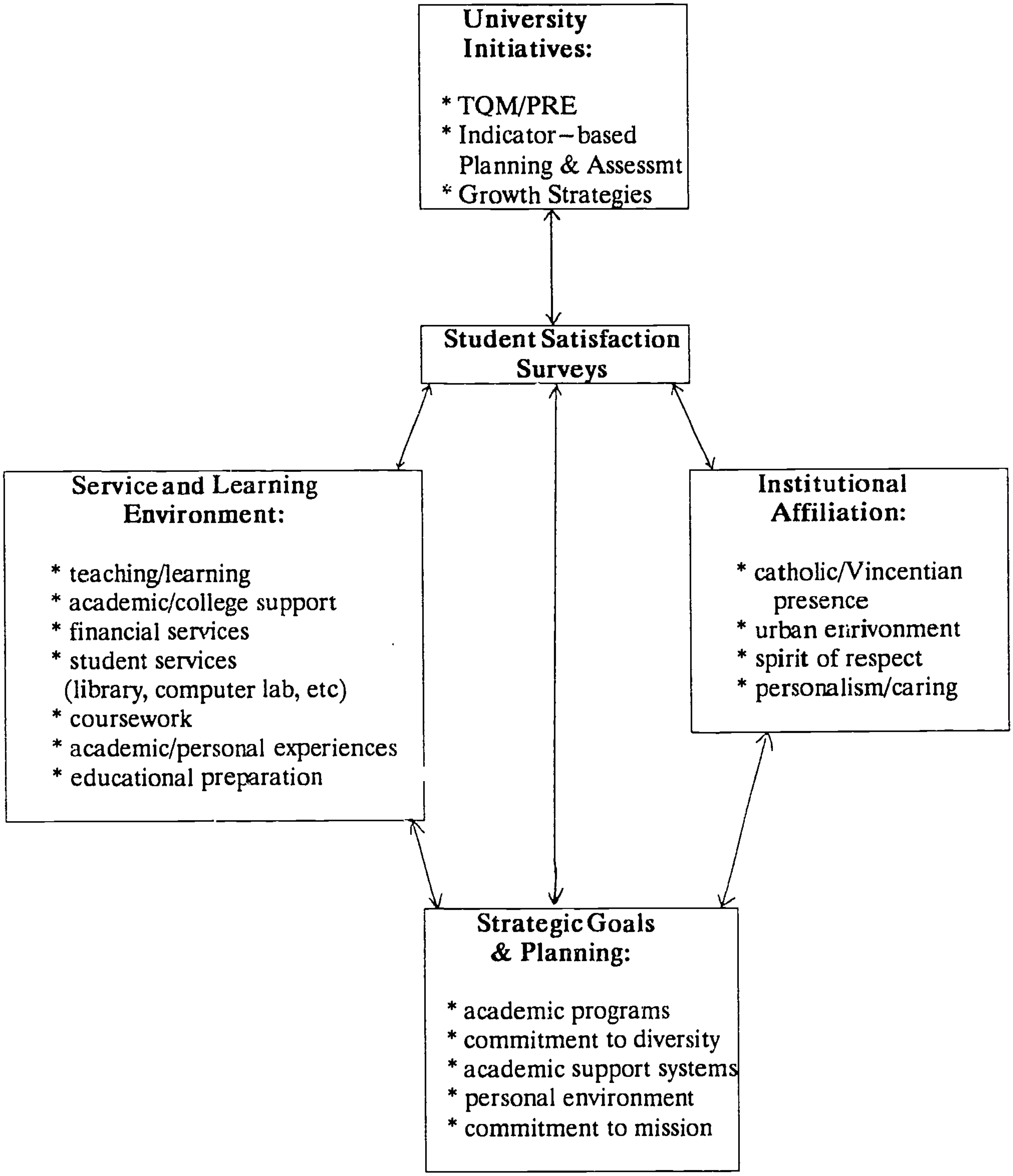
Conceptual Framework

Like institutions nationwide, DePaul University currently is undergoing a transformation driven in part by the increased diversification of its student body. As a result, DePaul is challenged to meet higher student expectations of the educational experience. To meet these challenges and to anticipate initiatives at the University including TQM, indicator-based planning and student outcome assessment, the institution annually conducts a student satisfaction survey which supports institutional planning and quality development and assesses customer satisfaction in two ways (*see figure 1*).

First, the survey assesses the service and learning environment, by examining satisfaction with broad academic areas and student services. The survey contains several content areas measuring student satisfaction with the service and learning environment including:

* teaching and learning (such as academic quality, academic reputation and faculty quality)
* academic and college support (such as academic advising and tutoring services)
* class scheduling (such as catalogs and course schedules)
* financial services (counselors and office assistance)

Figure 1. Key Elements in the Student Satisfaction Survey Framework



* student services (such as library, computer labs, etc)
* coursework (in both general education and major)
* academic and interpersonal experiences (including academic experiences and student and faculty interactions)
* educational preparation (in career and graduate education).

These content areas allow us to assess the quality of the student experience in a variety of academic and support services. This information ties directly to the strategic goal of enhancing the quality of DePaul's academic offerings.

Second, these surveys assess students' institutional affiliation, by assessing the their support of and congruency with the institutional values and mission. During the rapid growth and diversification of the student body, it is important for DePaul to continue to effectively communicate its mission to students and to assess how effectively we are fulfilling our mission as an urban, Catholic comprehensive university. The content area that most directly focuses on the mission is that of University Environment, measuring items related to:

* catholic/Vincentian presence
* urban environment
* spirit of respect between different cultures
* personalism and caring for students.

Assessment of student perceptions of DePaul's mission feed directly into the strategic goal of providing an environment of personal growth and its commitment to a diverse student body. Survey coverage of both these areas, the service and learning environment and the institutional affiliation, provides the University with critical quality assessment information that feeds back into the planning process.

Method for Conducting Student Satisfaction Surveys

Overview. Since 1991, the Office of Institutional Planning and Research has annually conducted student satisfaction surveys during the spring term to assess students' attitudes of their educational experience. The survey samples undergraduates, graduates and law students in order to build a longitudinal database allowing us to examine problems and improvements in student satisfaction over time and to create a linked model to study causal relationships between important variables.

Methodological Considerations. Special consideration is given to each step of the process in order to insure the success of the survey, including survey development, sample selection, survey preparation and mailing, and processing the data.

Survey Development. The office involves the larger university community, especially the Provost, vice presidents and deans, in survey development. We have developed our own survey instead of using a commercially available survey because it provides the university with more institutional-specific information for quality improvement. The limitation of using a survey developed in-house, however, is that no national comparative data are available.

In developing our survey, we strive for both consistency and flexibility. *Consistency* is important in the questions to be included and the question wording in order to examine trends in student attitudes over time. *Flexibility* is also important in order to address topical concerns of the institution and to continue to develop a survey that provides the university with meaningful information.

Sample Selection. In 1992, a sample of undergraduates, graduates and law students were selected to participate in the survey. In addition, all new 1992 freshmen are surveyed in order to link the satisfaction data with other data collected by the university, including retention information and data from the freshman Cooperative Institutional Research Project (CIRP), and to prepare for a longitudinal senior study which is still being developed.

Along with surveying all new freshmen to link freshman data with other available data for a more integrated analysis of student experiences, the overall sample size is constantly being expanded in order to provide more detailed analysis of survey data, for example by majors, to meet the increasing demand for information for outcome assessment and unit-level discussions.

In 1992, the overall response rate was 47.3%, with 56.5% for freshmen, 34.0% for continuing undergraduates, 56.5% graduates and 47.9% law students.

Survey Preparation and Mailing. Several survey research procedures for preparing and mailing the survey are implemented to increase survey response rates. A high response rate is important not only in order to achieve a sample of students that is representative of the student body, but also to insure a database of student respondents that can be linked to data from other sources. For example, in order to study the freshman year experience based on survey information from the CIRP study and the Student Satisfaction Survey, it is necessary to receive Student Satisfaction Survey responses from a large percentage of CIRP respondents. In addition, in order to study trends in student graduation rates by linking the Student Satisfaction survey to a graduating senior survey, the greater the response rate for freshmen, the larger the possible sample is for the longitudinal freshman/senior sample.

Students receive surveys in the mail during the spring term, giving special attention to the timing of the mailings in relation to the academic calendar so as not to mail surveys during finals. Follow-up mailings and other survey research procedures are used to maximize student response rates.

Processing Survey Data. Once the data has been collected, we easily manage data entry using SPSS/PC+ Data Entry. Although the preparation is time-consuming, the end product is user-friendly for both the student worker who manages data entry and the analyst.

Implication for Institutional Research

1. **Student satisfaction surveys provide information that can be integrated into broader institutional agendas including the quest for quality and Total Quality Management (TQM).** Student satisfaction surveys build on the central themes of total quality management (Chaffee & Sherr, 1992; Sherr & Lozier, 1991; Coate, 1991), focusing on students as important constituents and identifying problem areas within the university. Using student satisfaction surveys, student programs and services that need quality improvement can be identified, action strategies to improve satisfaction can be developed and success can be measured via trends in multi-year student satisfaction data.

For example, we develop a quality of services report analyzing student satisfaction with an extensive list of academic programs and student services. This report allowed us to identify service areas with which students are dissatisfied and develop strategies to improve satisfaction. In one instance, we found low responses to the Career Planning and Placement office indicating under-utilization. In addition, we found that although students felt DePaul prepared them for their chosen field, they were less certain about employment after graduation. Recommendations to increase student confidence in their futures focused on increasing awareness and use of these career counseling support programs and more effectively communicating how career counseling assists students in post-graduation employment. Improvements in awareness and use of Career Planning and Placement can be tracked with the survey.

2. **Institutional researchers can use year-to-year comparisons to track patterns in satisfaction over time.** Although institutional researchers are often pressured to make numerical comparisons of changing satisfaction, researchers should focus on patterns of satisfaction over time because numerical comparisons may not be feasible due to inevitable changes in the instrument, sampling strategies or external

events that may effect responses.

In one example, we experienced difficulty when we sought to compare reported 1991 and 1992 student attitudes of programs and services because of changes in the *sampling strategy*. The 1991 survey included a sample of undergraduates, graduates, and law students, and the 1992 survey included all freshmen and samples of undergraduates, graduates, and law students. An additional analysis that weights the 1992 freshmen in the undergraduate sample similarly to the 1991 undergraduate sample is necessary in order to make numerical comparisons across year useful.

In another example, the 1991-92 survey was mailed during the Chicago flood of April 1992. Because DePaul's downtown campus was severely affected by the flood, having to relocate students for about two weeks to classrooms at other downtown locations, student responses from this year were undoubtedly affected by this experience. Focusing on year-to-year trends in satisfaction will more accurately capture student assessment, rather that focusing on numerical comparisons of the percentage agreement on each item.

Because of the inevitable difficulties relating to changes in the instrument and the sampling strategy as well as the impact of uncontrollable external events, it is more practical to focus on changing patterns of satisfaction over time, acknowledging the limitations in numerical comparisons. Instead of comparing numerical changes in satisfaction on each specific service, we focus on clusters of items, general services, and the shifts in satisfaction of these clusters above or below a threshold of satisfaction. For example, instead of focusing on the increase from 75% to 85% satisfaction in the item assessing quality of instruction, a specific service, we focus on the cluster of responses relating to academic quality, a more general service, and whether they are above a 75% threshold level, indicating that three in four students are satisfied.

3. **Institutional researchers can develop longitudinal databases by linking**

student satisfaction data to other research. Student satisfaction data will be linked to student entry data (for example, CIRP data) to probe the relationship between pre-college attitudes and actual college experiences. Student satisfaction data will also be linked to a graduating senior survey, still in development.

Currently, we are linking satisfaction survey data with other institutional data, such as retention and academic performance data, to provide more integrated information about student retention. Preliminary results indicate notable differences in survey responses between 1991 freshmen who enrolled in Autumn 1992 and those who did not enroll. Freshmen who did not re-enroll were less satisfied than those who did with their experiences with Admissions, Orientation, and the real-life preparation of their educational experiences.

The findings from linking the survey data with retention data suggest strategies for early identification of students at risk that cannot be gleaned from analysis of retention data alone. One strategy is to have students evaluate Admissions and Orientation early in the Autumn term and target retention efforts on those students who were dissatisfied. Another strategy is to more effectively communicate the relevance of the freshmen curriculum to student's future career and life experiences.

4. **Student satisfaction data provide institutional researchers with the opportunity to build a research framework that incorporates important variables that impact student satisfaction.** We conducted a factor analysis using the items assessing University environment and correlated these factors with overall student satisfaction. From these items, we identified four central features of the student environment (caring for students, academic life, social and campus life, and mission and values) that drive satisfaction and used these to develop action strategies aimed at improving satisfaction.

For example, for freshmen, the factor caring for students (which included the items such as personal attention and feeling welcome) was more strongly correlated to overall satisfaction than the factors of academic life (with items such as academic atmosphere and overall instructional quality) or social and campus life (including good social atmosphere and places to relax), followed finally by the factor mission and values (including Catholic presence and commitment to urban mission). In contrast, for graduate students, academic life was most important to overall satisfaction, followed by mission and values and finally social and campus life. This analysis provides us with a framework for student satisfaction at our institution and suggests that strategies to strengthen student satisfaction should be tailored to different student groups.

In addition, we included a multi-item scale measuring satisfaction with academic aspects (academic experiences and intellectual development) and social aspects (student-student and student-faculty interactions) of the educational experience (Pascarella and Terenzini, 1983). This scale allows us to study student experiences that have been identified as important in college student research (Pascarella & Terenzini, 1991) in order to further focus our strategies for improving satisfaction.

Maximizing Student Satisfaction Data Utilization

1. **Institutional researchers can encourage utilization of student satisfaction data by providing specific, segmented information that can more easily be integrated in areas such as program review and outcomes assessment.** Using student satisfaction surveys, institutional researchers can study a sample of students in order to pinpoint dissatisfied student groups and target specific problem areas. The institution is more likely to accept this specific information because it provides a focus for action.

As described in several of the examples above, findings from the student satisfaction survey suggested several specific strategies for improvement. For instance, when survey data was linked to retention data, findings suggested specific strategies to enhance retention which include student evaluations of Admissions and Orientation to identify potentially at-risk students and include more effective communication of the relevance of the freshman curriculum. In addition, the factor analysis of survey data and the relationship of these factors to overall satisfaction for each student group provides the institution with priorities for improving satisfaction.

2. **Institutional researchers should collaborate with user offices to utilize focus groups or follow-up surveys to provide more in-depth analysis of identified problem areas.** By design, student satisfaction surveys provide a global snapshot of student satisfaction and institutional researchers should use additional techniques to probe problem areas, thereby increasing the usefulness of the data.

Much of the dissatisfaction in services is caused by a lack of collaboration in cross-functional areas. These focus groups and follow-up procedures help to pinpoint where the process breaks down and how certain university processes need to be re-engineered and streamlined. For example, the finding that only about one in three freshmen were satisfied with the timeliness of the grade reporting signaled an area where the process had broken down and quality needed to be improved. The Office of the Registrar conducted a focus group with students who indicated dissatisfaction with the timeliness of grade reporting in order to further study the problem and develop strategies for improvement. The focus group discussion, attended by representatives from several offices including the Registrar, Enrollment Management, Institutional Planning and Research and Information Systems, highlighted that both the problem of grade reporting and the solutions required involve several areas in the institution, including both administration and faculty. Improvements over time in student attitudes of grade reporting can be tracked with the survey.

An office interested in conducting a follow-up analysis may desire to select a sample of students from the student body for the follow-up or may desire to further study the group of students who responded in a particular way to the survey. For example, because of the high number of students dissatisfied with the timeliness of grade reporting, the Office of the Registrar could have chosen to select a sample of students at large for a focus group. However, the Office chose to follow-up with those survey respondents who indicated that they were dissatisfied with grade reporting.

In these cases where the original respondents are sought for follow-up analysis, institutional researchers must face the dilemma of confidentiality. Institutional researchers must develop procedures to balance the promise of confidentiality made to the respondents with the desire of user offices to go back to the original customer, in this case the responding student, to follow up on issues of service quality.

Our office addresses the dilemma of confidentiality by requesting that user offices interested in following up on certain results go through our office to recontact students. We handle contact of the original respondents by explaining the circumstances surrounding the desire to further explore results and asking students if they would like to further participate. If they wish to participate, they are asked to contact our office and we pass their name to the office conducting the study; if they do not wish to participate they need not call and we do not contact them further.

3. **Audience-specific communication strategies can be developed to assist the University in using student satisfaction data and better understanding the utility of student satisfaction surveys.** We focus on several types of strategies to enhance audience-specific communication: 1) reporting strategies, 2) graphical presentations of data, 3) utilizing current technology to develop user tools, and 4) development of a student database focused on strategic issues.

First, *strategies for reporting data* should focus on presenting information to targeted university audiences that provides an integrated analysis of the issues.

These reports should include a quality of service report as well as several topical reports focusing on specific issues from the data and the university strategic planning agenda. These issues-oriented reports, which may include topics such as student diversity and geographic origin of students, should integrate information from other sources to provide an in-depth, integrated analysis of the issues, relying on graphics to enhance data presentation, and feed information back into the strategic planning process.

Two difficulties exist in reporting student satisfaction data. First, the reports need to provide a focused analysis of the specific issues relating to strategic planning. However, because of the richness of the integrated datasets, it may be difficult to focus the data around specific issues. Second, it may be difficult to provide user offices with evidence of improvement that is both statistical and practical.

Second, by using *graphical presentation of data*, we can focus on broader issues, such as trends in diversity at the university level, and can effectively summarize data relating to these broad issues from a variety of data sources including the Student Satisfaction Survey for members in the university community who may not read or have access to the available reports. We use graphics in our reports to highlight trends in the data, and we provide presentations of the data based on these graphical analyses to audiences such as the Board of Trustees.

These audiences, however, are interested not only in University data (including customer satisfaction data), but comparative data, for example national student information. Because we develop our own student satisfaction surveys, direct comparative data is often unavailable.

The third strategy is the *utilization of available technology* to develop tools that allow offices further access to the data for more specialized analyses of specific data questions. We plan to provide student satisfaction data and reports in a network environment to make access easier. This would allow offices to integrate survey data into their work by easily tailoring survey data tables for their own reports and presentations.

We also have developed a Quattro Pro data base tool that allows individuals to easily query the database and generate specific crosstabulations. This allows offices such as Student Affairs to probe more specifically questions they have about specific populations of students.

Increasing access to data for user offices with specific data questions may be problematic, however, if offices overestimate the depth of student satisfaction data. This can occur, for instance, if an office overemphasizes the low satisfaction of a service area that has very low response rates.

Finally, we are developing a *database organized around strategic university issues*, including such sources as student satisfaction data, retention data and academic indicator data. This will help university planners focus on important university issues, for example student retention, and allow the university planning committees such as the Retention Committee access to critical student data.

In summary, by developing audience-specific communication strategies, institutional researchers not only provide oral and written reports of the data to the institution, but utilize available technology to provide offices hands-on access to information that can feed directly into specific projects. Through increased awareness and use of the Student Satisfaction Survey data, offices can develop a better understanding the strengths and limitations of the Student Satisfaction Survey.

Areas for Continued Improvement

In summary, this paper discusses the methodology of conducting student satisfaction surveys, the implications of these surveys for institutional research, and strategies for maximizing their use. From this discussion, the following section highlights a few general areas of perennial concern for institutional researchers conducting student satisfaction surveys.

1. **Involve users of the survey in the survey development.** This builds ownership in survey results and helps to insure that the survey will provide useful information for the university community that can feed into the strategic planning process.

2. **Develop a methodology for conducting the survey that is both consistent and flexible, linking the survey measures to the university strategic goals and objectives.** This will help insure the ability to draw longitudinal conclusions as well as address important topical concerns in order to provide valuable information for university planning.

3. **Maximize response rate by using a variety of survey response techniques.** These include such things as length, visual presentation of the survey and follow-up mailings. This is especially important when data linking and longitudinal analysis is desired because of respondent attrition.

4. **Make data easy to understand.** Develop an audience-specific approach to reports and presentations, using graphics to enhance understanding of results. Integrate survey data with data from other sources to provide comprehensive analyses of important university issues.

5. **Make data useful by linking results to policy issues.** This starts from developing a survey that asks the right questions. Once the data is collected, usefulness can be enhanced by using technology to create easy access to data, providing practical suggestions, and integrating data from multiple sources to develop a broader understanding of the issues. This data, focusing on important strategic planning issues relating to the assessment of the academic and student services as well as institutional affiliation, will be useful in assessing the quality of the educational experience as well as in the institution's planning process.

Selected References

Chaffee, E. & Sherr, L. (1992). Transforming postsecondary education. ASHE-ERIC Higher Education Report No. 3

Coate, L. (1991). Implementing total quality management in a university setting. New Directions for Institutional Research, 71, 27-38.

Pascarella, E. & Terenzini, P. (1983). Predictions voluntary freshman year persistence/withdrawal behavior in a residential university: A path analytic validation of Tinto's model. Journal of Educational Psychology, 25, (2), 215-226.

Pascarella, E. & Terenzini, P. (1991). How college affects students. San Francisco, CA: Jossey Bass.

Sherr, L. & Lozier, G. (1991). Total quality management in higher education. New Directions of Institutional Research, 71, 3-12.