Interpreting Assessment Reports on Undergraduate Degree Programs At Kansas State University



IDEA Center Kansas State University Manhattan, Kansas

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INTRODUCTION

Like most universities, Kansas State University provides a wide variety of programs in response to its instructional, research, and service missions. Those who conduct or administer these programs are committed to providing them in the most effective and efficient manner possible. The "Assessment Reports" described in this manual represent one tool for examining effectiveness and for guiding improvement efforts.

The reports focus exclusively on the undergraduate instructional program; they ignore graduate programs as well as programs in the research and service realms. This focus is largely fortuitous; it was chosen because the Kansas Board of Regents requested each of the universities under its jurisdiction to develop a plan for systematically and regularly assessing its undergraduate programs. Although the University is obligated to provide the Board with summaries of its assessment findings, the major concerns are that faculty and administrators understand the major ways in which the undergraduate program has been successful (or unsuccessful) and that information be provided which will identify some fruitful targets for improvement.

Information provided by these reports comes from several sources: (1) graduating seniors; (2) bachelor degree graduates who completed their degrees approximately one year previously; and (3) bachelor degree graduates who completed their degrees approximately four years earlier.

To obtain information, survey forms were sent to (a) all seniors (December and May graduates in a designated department as identified by official University records), (b) all those who graduated one year previously (fall or spring graduation) from a chosen department (identified by the Alumni Association), and (c) all those who graduated four years previously (fall or spring semester) from a given department (identified by the Alumni Association). The assessment plan calls for collecting this information for a given department every four years. In order to meet this expectation, seniors and alumni from about one-half of the university's departments are surveyed every other year. Programs in the Colleges of Business, Education, Engineering, and Human Ecology are surveyed in the same year as are programs in the Colleges of Agriculture, Architecture and Design, and Arts and Sciences. This interpretive guide summarizes data collected during the 1996-97 (Business, Education, Engineering, and Human Ecology) and 1998-99 (Agriculture, Architecture and Design, and Arts and Sciences) survey administrations.

The first versions of the three survey forms (senior, one-year alumni and four-year alumni survey) were designed by a Faculty Senate Committee appointed to develop an assessment proposal in the Summer of 1988. Those surveys were used for the 1988-89 and 1990-91 academic year survey administrations. In order to address later University concerns the surveys were modified by a Faculty Senate Committee that convened in the Summer of 1992. These revised surveys were administered in the 1992-93, 1994-95, 1996-97, and 1998-99 academic years. The changes made to the surveys were modest and responses to most items in the current surveys can be compared to identical (or nearly identical) items from the 1988-89 survey.

In developing survey forms, the Committee constructed three types of questions: (1) those which <u>described</u> the respondents (state of residence, gender, etc.); (2) those which represent <u>outcomes</u> (measures of <u>progress</u>, <u>accomplishment</u>, or <u>success</u>); and (3) those which represent the <u>processes</u> which, presumably, helped to account for the outcomes (the activities and environment which characterized the undergraduate experience). A separate report has been made for each of these three foci.

Undergraduate programs typically take four or five years to complete. A large number of faculty members, in and out of the department, are responsible for providing parts of the program; counselors, advisors, and administrators also make contributions; peers, parents, and other significant adults exert considerable influence on many students; for over one-half of the graduates, credit was earned at more than one college or university in addition to K-State. Given this multitude of influences and the complexity of their interactions, it is obviously impossible to determine the specific effect of each element. Explanations for specific findings will almost always have to be <u>inferences</u> drawn from experience and personal knowledge rather than <u>data-based conclusions</u>.

Similarly, it was not feasible to collect all information which could be relevant to Nor have measurement assessment. authorities found valid ways to assess all relevant characteristics or factors. In short, the reports make no pretense at being comprehensive assessments. On the other hand, seniors and graduates are appropriate groups to provide feedback about the undergraduate experience and its value; the information they were requested to provide is relevant, in various degrees, to most undergraduate programs. Therefore, a careful reading and interpretation of the findings should result in some constructive ideas as to how the program could be made more effective.

THE DESCRIPTIVE REPORT

Three types of information are provided by this report. The first section describes some basic characteristics of the sample, and the second summarizes student reactions to KSU and its majors on an overall basis. Sections III (employment) and IV (graduate/professional school) provide descriptive information about post-college experiences for first year and/or fourth year alumni.

Section I. Basic Information

The number of respondents and the response rate are reported for the senior, firstyear alumni, and fourth-year alumni. For the University as a whole, return rates for these three groups were 60%, 56%, and 37%, respectively. Graduating seniors (Fall, 1996; Spring, 1997), one year alumni (Fall, 1994; Spring, 1995 graduates) and four year alumni Fall, 1992; Spring, 1993 graduates) in the Colleges of Business, Education, Engineering and Human Ecology were surveyed during the 1996-97 academic year. During the 1998-99 academic year graduating seniors (Fall, 1998; Spring, 1999) and alumni from the Colleges of Agriculture, Architecture and Design, and Arts and Sciences were surveyed. Fall 1996 and Spring 1997 graduates were surveyed in the Fall of 1998 (One-year alumni) and Fall 1994 and Spring 1995 graduates were surveyed during the Spring of 1999 (Four-year alumni).

Confidence in findings increase as the return rate approaches 100%. Results based on less than 50% of those asked to respond should be regarded as extremely tentative (e.g., four-year alumni results).

Approximately 47% of the students graduating from Kansas State, are female and 53% are male. While proportions are not dramatically different, a higher percentage of women responded to each survey. Specifically, the representation of women and men who responded to the four-year alumni survey was 51% and 49% respectively. Fifty-three percent of the senior and one-year alumni survey respondents were women and 47% were men.

Both alumni groups provided racial/ethnic and citizenship information. Approximately 95% responded they were white and 99% of the respondents indicated they were U.S. citizens. While the percentage of K-State graduates who represent minority groups is relatively small, response rates for minority alumni were lower than the response rates of alumni who indicated they were white.

provided The alumni groups also information regarding transfer status. Over half of both groups transferred credits to KSU. Community colleges were the most common source of transfer students: about 57% of these transferred less than 21 hours, while 25% transferred more than 40 hours. Other Kansas Regents' universities provided the second largest number of transfers, but this was substantially less than one-third of the community college total; the majority of these students transferred less than 21 hours.

Section II. KSU and Major: Choice/Satisfaction

Both alumni groups were asked if they would choose the same institution if they were to start over in higher education. These alumni exhibited a strong loyalty to the institution. Over ninety percent indicated they would "Definitely" or "Probably" enroll again at KSU (about 73% "Definitely" and about 20% "Probably"). Only 19 alumni (seven-tenths of one percent) indicated they would definitely <u>not</u> attend K-State if they were to start over.

First year alumni were asked to indicate their preferences for universities at the time they applied to KSU; about 92% indicated that K-State was their first choice.

Section III. Employment Experiences

Both groups answered several questions about their employment experiences. In terms of salary, 46% of the first year alumni indicated they were earning between \$20,000 and \$30,000, while about 21% were earning less than \$20,000. The effects of advancement are apparent. Over 55% of four year alumni reported earning over \$30,000 in their current position while only 17% of that group indicated they earned that much in their first position.

The percent of alumni whose first position was in Kansas was slightly higher for one-year alumni than for four-year alums. Fifty-eight percent of the one-year alums and 54% of the four-year alumni found their first postgraduate position in the state of Kansas. For both groups of alums, Missouri was the second most common employment locale and Texas was third. Graduates were employed in 50 different states, the District of Columbia, Puerto Rico, and five foreign countries. While there was a definite Midwest emphasis, employment was clearly National.

First year alumni were asked several other questions.

...More than 70% were employed full-time; 22% were in graduate or professional school (more than 1/3 of these were also employed), and only 3% were not employed outside of the home.

...A variety of sources were used to locate their initial position; "job lead from relative or friend" was cited most frequently (20%), followed by "other" (16%) and "newspaper ad" (15%).

...About 64% were in positions requiring a bachelor's degree; 9% were in positions where an undergraduate degree was irrelevant.

...For 70% their current position is either very close or fairly close to the one they aspired to prior to graduation.

A few questions were asked only of the four-year alumni group.

...For 70%, the first position was held for less than 2 1/2 years. About 22% had been in their current position for over 2 1/2 years.

...Although the modal number of hours worked per week was 40-44 both for the current position and for the first position, over half of the respondents reported working more than 44 hours per week; and 38% reported working more than 50 hours per week.

Section IV. Graduate/Professional School Experiences

At the time the survey was administered, about 22% of first year alumni were attending over 95 different graduate/professional schools. More than 31% (101) of these were enrolled at K-State; only four other institutions, KU (28), Wichita State (23), KU Med Center (17), and Washburn U. (16), enrolled more than ten alumni. Of those attending graduate school, 45% (146 graduates) aspired to complete a master's degree; thirty percent (97 graduates) intended to complete a Ph.D. degree, and 25% (80 graduates) planned to complete a professional degree.

A minority (29%) of the fourth year alumni had pursued an advanced degree, but 64% had been involved in formal professional development courses through a continuing education program. In addition, about half pursued a continuing education opportunity to learn new job skills, and 42% pursued a personal interest through this mechanism.

IMPLICATIONS

Readers of the departmental or college report will find it helpful to compare responses of their graduates with the University-wide results reported in this section. To the degree that graduates (or seniors) from a given department/college differ from KSU graduates (or seniors) in general, interpretations of results from the <u>OUTCOMES</u> and <u>PROCESS/</u> <u>ENVIRONMENT</u> reports may be affected. For example, if a disproportionate number of respondents had transferred over 40 credits, the department/college would have less opportunity to influence outcomes than if the opposite were true; if large numbers were employed in work unrelated to their major, graduates would likely be more critical of the preparation they received; etc.

THE OUTCOMES REPORT

| n promoting development | all, or most, departments to be "effective" (or "ineffective") on a given attribute, it is recommended that interpretations alue of the mean. The following scale is suggested for nean: |
|-------------------------|---|
| ''Extremely High'' | = a mean of 3.50 or above; or median = "10+ times." |
| "Very High" | = a mean in the range of 3.25 to 3.49. |
| "High" | = a mean in the range of 2.85 to 3.24; or median = "6 to 10 times." |
| ''High Average'' | = a mean in the range of 2.60 to 2.84. |
| "Average" | = a mean in the range of 2.40 to 2.59; or median = "3 to 5 times." |
| "Low Average" | = a mean in the range of 2.15 to 2.39. |
| ''Low'' | = a mean in the range of 1.80 to 2.14; or median = "1 to 2 times." |
| "Very Low" | = a mean in the range of 1.50 to 1.79. |
| "Extremely Low" | = a mean below 1.50; or median $=$ "0 times." |

4-point rating scales which were employed, the two highest categories is reported. On the "favorable" responses, so that this report can be taken as an indication of the percentage of respondents who regarded KSU's contribution to a given attribute as positive.

This report is divided into three sections:

(I) <u>Development of Academic Skills;</u>

(II) Gaining Educational Breadth; and

(III) Specialization (Major Field).

The data comes from replies from seniors, first year alumni, and fourth year alumni.

Section I. Development of Academic Skills

Seniors rated their progress at KSU in developing six academic skills: Writing, Computer Familiarity, Quantitative Thinking, Critical Thinking, Problem Solving, and Independent Learning Capacity. In addition, both alumni groups rated KSU's contribution to the last two of these (Problem Solving; Independent Learning). All ratings were made on a four-point scale ranging from "Very little" or "None" (=1) to "Much" or "Very much" (=4).

In general, Kansas State seniors and graduates credited the University with making strong contributions to the development of their basic academic skills. The two highest categories ranged from about 68% (Quantitative Thinking) to about 93% (Problem Solving). Average ratings by seniors for all of the basic skills (Writing, Computer Skills, Quantitative Thinking, Critical Thinking, Problem Solving and Independence) were in the "High," or "Very High" category. Average ratings by one-year and four-year alumni for Problem Solving were "Very High," while Independent Learning were "Extremely High."

IMPLICATIONS

Departments differ in the importance attached to the academic skills reviewed in this section. They also differ in the standards by which "acceptable achievement" is judged. The implications of a given finding depend on the importance of the characteristic to a given undergraduate degree. In one curriculum, <u>Computer Familiarity</u> may be vital; in another it may be desirable, but not essential. A mean of 3.0 would be reason for concern for the former, but wholly satisfactory for the latter.

Therefore, it is suggested that scores for each of the characteristics be interpreted in relation to departmental priorities and standards. If ratings are both relevant and disappointing, and if confirmatory evidence exists from other sources (courses, grades, etc.), the department will probably want to establish a process for affecting improvements. This could involve the appointment of a special study group to analyze the situation and explore alternative approaches. An in-depth study will be facilitated by familiarity with the <u>PROCESS/ENVIRONMENT</u> report as well as an examination of the curriculum, of specific courses, and of the learning opportunities available to students.

Section II. Gaining Educational Breadth

When mandating that universities assess their undergraduate programs, the Regents cited "General/Liberal Education" as a special The belief that college graduates focus. should be "Well rounded" has been a cornerstone of American higher educational thought for a long time. However, there has never been a consensus on what "General/Liberal Education" means. As a result, there have been vigorous debates in higher education about its purposes, goals, objectives, and methods. The debate has been incorporated into curriculum planning efforts at Kansas State for many decades. The lack of consensus was apparent in the diversity of "General/Liberal Education" requirements which had existed for different colleges and departments. The University General Education Program, which was implemented Fall (1997), will be assessed using multiple sources of information. Information included in this section (Educational Breadth) will provide some baseline data. The responses of students who completed the previous general education curricula will be compared to the responses of those who complete the new general education program (classes of 2001 and beyond) for items identified as being directly related to the goals of the new initiative.

Seniors rated their progress on gaining a broad background, learning about science (its nature, new developments, and the consequences of those developments), developing an understanding and appreciation of literature and of the fine arts, and becoming more aware of cultural differences. They also rated their progress on a number of "Personal/Social Development" characteristics, including self-understanding, values development, interpersonal skills (understanding others; functioning as a team member), and developing good health habits. The two alumni groups responded to questions related to development in most of these breadth areas. These included ratings of the KSU contribution to a given type of development (e. g., self-understanding; leadership skills) and descriptions of the "free time" activities of the graduates which were related to a given type of "broadening" (e. g., attending concerts or plays; visiting museums; participating in a study group; etc.). In addition, the alumni groups rated the KSU contribution to the enhancement of family life, community participation, and the use of leisure time--areas of adult functioning which some proponents of "General/Liberal Education" argue will be favorably influenced by positive educational experiences.

A total of 58 measures of "breadth" was obtained; of these items, 15 were "behavioral" measures. Using the scale suggested previously for interpreting absolute averages, the distribution of <u>evaluative</u> and <u>behavioral</u> feedback is given.

| | <u>Evaluative</u> | <u>Behavioral</u> | |
|--------------------------------|-------------------|-------------------|--|
| Extremely High or Very High | 14 (33%) | 1(7%) | |
| High or High Average | 22 (51%) | 4 (27%) | |
| Average | 4 (9%) | 4 (27%) | |
| Low Average or Low | 3(7%) | 5 (33%) | |
| Very Low or Extremely Low | 0(0%) | 1(7%) | |

When evaluations were based on ratings of the KSU contribution (Evaluative column), they were more likely to be favorable than when based on the Behavioral description; 84% above "Average" vs. 34% above "Average." This suggests that respondents were more likely to "feel good" about an experience designed to broaden their education than they were to act upon that feeling behaviorally. For example, both groups of alumni rated the University "Very High" in helping them to gain knowledge which enriched their lives; but neither group was likely to attend lectures or be members of a study group (both rated "Low"). While the results appear to be contradictory, other behavioral ratings related to knowledge acquisition were more positive. A "Very High" behavioral rating was obtained on "Reading for general information"; a "High Average" rating was obtained on "Watching public television," while an "Average" rating was obtained on "Using library resources."

Ratings of the University's contribution to general broadening were extremely diverse, ranging from "Low" (four-year alumni report of how often they attend lectures, attend plays or participate in study groups) to "Very High" (frequency with which four-year alumni read for general information). Of the three science ratings, two were "Average" and one "High Average." Some of the lowest ratings were in the Humanities and Fine Arts areas; six of the eight evaluative ratings were "Low Average" or below. Social science ratings were in the "High Average" range for seniors and in the "High" range for recent and four-year alumni.

The surveys also inquired into Development" "Personal/Social and "Community Participation," aspects of human functioning which some advocates of "General/Liberal Education" believe will be positively affected by educational breadth. Of the 29 measures related to "Personal/Social Development," 20 were "High" or "Very High," including all of the ratings related to the development of personal values, selfunderstanding, and interpersonal functioning. Six measures were rated "High Average" and only three were "Average" or below; one "Average" rating was in the personal health area and one "Low" rating occurred in the category "Use of leisure." Ratings from both alumni groups suggested that the University's contribution to their commitment to community betterment was in the "Average" to "High Average" range.

IMPLICATIONS

The relevance of findings in this section is determined by the department's position with respect to educational breadth. Departments which view education as primarily a cognitive enterprise may choose to ignore behavioral data. Some departments may regard "Personal/Social Development" and/or "Community Participation" as personal matters far removed from the concern or responsibility of higher education. Hopefully, the broad range of outcome possibilities will provoke discussion by curriculum committees or departmental faculty about the relative importance of specific items to their curriculum.

These findings offered few signs of strong educational development in the humanities/fine arts areas. Perhaps Kansas State students, as a whole, have negative predispositions toward this type of broadening. If this is so, curriculum planners will need to consider how much influence should be given to student preferences, to society's demands, and to educational ideals in designing curriculum requirements and experiences.

Section III. Major Field /Specialization

To assess outcomes related to their specialization, respondents answered questions about educational experiences associated with the major field of study, about their employment, and about their experience in advanced programs of study. Combined results for the seven colleges are discussed in this section.

A. Major Field

Both groups of alumni were asked whether they would choose the same major if they were to begin college again; about 69% of each group (71% one year and 67% four year) replied "Yes" (either "Definitely" or "Probably"), while about 18% (16% one year and 20% four year) replied "No."

These groups were also asked to rate the degree to which KSU contributed to (a) their knowledge and understanding of the major field and (b) career-related knowledge and skills. Ratings on the 4-point scale ranged

from 3.41 to 3.70; the knowledge and understanding items were in the "Extremely High" range for both alumni groups and the career related items were in the "Very High" range for both groups. The knowledge and understanding items' means were the highest obtained in the "Outcomes" section.

B. Employment

Employment status of first year alumni was determined. The descriptive report noted that more than 70% were employed full time; another 11% were either employed part time or employed while attending graduate or professional school, and about 3% were not employed outside the home. Of those who were employed full time, over 80% regarded their employment as having "Definite" or "Possible" long-term potential; of the remainder, most were working primarily to earn money while trying to decide what type of career to follow.

In both surveys, the majority of graduates expressed satisfaction with each of eight features of their current position. They were most satisfied with the opportunity to learn (over 78% "Very Satisfied" or "Satisfied") and least satisfied with opportunities for "Prestige/Recognition" (about 57% "Very Satisfied" or "Satisfied").

Over 50% were in positions which were highly related to their undergraduate field of study, while about 12% were in positions unrelated to their majors. A variety of reasons were given for accepting work in a field unrelated to the undergraduate field, with the most prominent reasons being (a) an exceptional opportunity in an unrelated field, (b) the inability to find work in a field related to the major, and (c) other.

Other employment related outcomes included:

...About 36% had accepted a job before they graduated; but about 21% required more than six months after graduation to secure a position. Sixty-six percent found a position after 0-5 interviews, but 10% had at least 15 interviews before accepting their first position.

...About 74% reported that KSU provided "Good" or "Excellent" preparation for their work--and one-half thought they held a competitive advantage over those graduating from other colleges. Less than three percent felt disadvantaged by their affiliation with KSU.

C. Graduate/Professional School Experience

From the four-year alumni group, a total of 312 (29%) had previously attended or were currently attending graduate school. Of those rating their preparation for advanced education, a majority, 76% (first year) and 87% (fourth year), reported that K-State provided "Good" or "Excellent" preparation.

More than 90% of first year alumni reported their graduate program was either directly or somewhat related to their undergraduate major. Over three-fourths attended their first choice university, while only nine percent were not accepted for admission by their first choice institution.

IMPLICATIONS

Alumni generally gave the University high marks for providing them with specialized education in their major field. They reported that, through the major field, they gained considerable subject matter expertise and professional qualifications. The vast majority reported favorable employment experiences which provided a variety of satisfactions to them, and most thought the University had done a good job in preparing them for work. One half thought they were advantaged in competing with graduates of other universities.

Although only a minority attended graduate or professional school, those who did were successful in attending their firstchoice school and in making academic progress. A substantial majority regarded KSU's preparation for graduate school as "Good" or "Excellent." While, in general, graduates regarded the University's contribution to their specialization more favorably than the contribution to either basic skills or "General/Liberal Education," results varied widely among curricula. Departments are encouraged to examine results for their graduates from the perspective of the overall University survey results. They are also encouraged to compare results across the three types of educational development for purposes of determining whether or not there is an appropriate balance among skills, breadth, and specialization.

THE PROCESS AND ENVIRONMENT REPORT

Results were again compared with those for all other departments. The descriptive phrase ("High," "Low Average," etc.) has the same meaning as it has in the outcome report. A different scale for interpreting the "absolute" values must be used, however, since a 5-point, rather than 4-point, scale was used for most questions in this section.

| ''Extremely High'' | = a mean of 4.50 or above. |
|--------------------|----------------------------------|
| ''Very High'' | = a mean of 4.00 to 4.49. |
| "High" = a mea | an of 3.50 to 3.99 |
| ''High Average'' | <i>= a mean of 3.25 to 3.49.</i> |
| "Average" | = a mean of 2.75 to 3.24. |
| "Low Average" | = a mean of 2.50 to 2.74. |
| ''Low'' | = a mean of 2.00 to 2.49. |
| "Very Low" | = a mean of 1.50 to 1.99. |
| "Extremely Low" | = a mean of 1.49 or below. |

This report is intended to provide the reader with ideas about how the quality of educational experiences at KSU could be improved. It does this by describing the "context" in which the educational program in question operates, including characteristics of the department (the academic "home" of respondents), a general description of the KSU environment as perceived by the senior class, and the educational objectives of undergraduates, as reported by alumni. In addition, the two alumni groups expressed their views about the amount of emphasis given to 11 different educational experiences.

Section I. Characteristics of the Major Field

Seniors were asked to describe (a) the students majoring in this field, (b) the faculty in the department, (c) the types of support the department provided to its undergraduate majors, and (d) the general atmosphere characterizing the department. These ratings were made on a 5-point scale ranging from "1 = Definitely false" to "5 = Definitely true"; a rating of "3" described an "In-between" view.

Seniors from the seven colleges surveyed rated their classmates "High" or "Very High" on all six characteristics. "Career Oriented" and "Supportive" were the most frequently chosen descriptors, and "Competitive" and "Interested in a Broad Range of Ideas" were least often chosen (but over 64% of the ratings for these characteristics were "Definitely true" or "More true than false").

All but one of the average ratings of faculty were above 4.0 ("More true than false"). Over 90% thought the faculty knew their subject well, and over three-fourths also rated the faculty as "Accessible," "Good Teachers," and "Interested in Students." About 70% thought the faculty were "Willing to Listen to Students."

Respondents also gave "High" to "Very High" ratings to the six questions about departmental support. Over three-fourths of the seniors reported that the department encouraged familiarity with modern equipment and about 68% reported being encouraged to participate in professional interest groups. About 65% reported that students were encouraged to become personally acquainted with faculty members and to attend specialized seminars or colloquia. Over 61% reported that students were encouraged to participate in research projects; 55% of the seniors responded "Definitely true" or "More true than false" to receiving support in finding appropriate employment or pursuing graduate study.

In terms of the environment, seniors generally reported a high degree of mutual respect and support among students and professors (4.12, "Very High") and of academic stimulation (4.30, "Very High").

Section II. Characteristics of Advising

About 61% of the seniors regarded their departmental academic advising as effective; however, there were exceptionally large differences among departments on this question. One-year alumni were most satisfied with their access to advising (84% "Satisfied"). While still generally satisfied, they were less satisfied with the assistance they received in course selection and program of study assistance (77% "Satisfied") and the information provided about graduate school and employment opportunities (65% "Satisfied").

Section III. Curriculum Recommendations

Both alumni groups were asked for recommendations (more, same, less) regarding 12 kinds of educational experiences. In no instance was less experience recommended. The predominant recommendation was "No change" for seven experiences: writing skills; mathematical skills; interpersonal skills; background in natural sciences; background in

| | One Year | Four Year |
|--|-----------|-----------|
| Six Most Important Educational Goals for Alumni | Alumni | Alumni |
| 1. Gaining career knowledge and skills. | Most Imp. | Most Imp. |
| 2. Increasing knowledge in the major field. | Second | Second |
| 3. Learning to think clearly and solve problems effectively. | Fourth | Third |
| 4. Developing skills in leading or participating | | |
| in groups/teams. | Third | Fourth |
| 5. Becoming independent, self-reliant, responsible. | Fifth | Fifth |
| 6. Knowledge for personal enrichment | Sixth | Sixth |

humanities and fine arts; background in social sciences; and "theory" courses in the major field. In two areas, problem solving skills and thinking/reasoning skills, about an equal number recommended either more or the same emphasis. In three other areas, the majority recommended more experience: computer skills (80%); "application" courses in the major field (62%); and oral communications (55%).

Section IV. Most Important Objectives of KSU Undergraduate Programs

Alumni respondents were asked to indicate the three educational goals which were most important to them when they were students. While rank orderings were slightly different, both alumni groups identified the same six items as the most important.

Over 60% of the alumni included the goal related to career preparation as one of their three most important. Less than 22% of each alumni group included their sixth ranked goal ("Knowledge for personal enrichment") among their three most important.

Section V. KSU Environment

The University environment was most frequently characterized as "Emphasizing critical, evaluative, and analytical skills" (5.27 on a seven point scale), and "Emphasizing academic, scholarly, and intellectual qualities" (5.19). "Emphasizing development of vocational and occupational competence" (4.79) and an "Emphasis on the practical value of courses" (4.76) were also evident, though less pronounced. "Emphasis on aesthetic, expressive, and creative qualities" was least apparent to the respondents (4.38).

IMPLICATIONS

On the whole, those completing degrees at Kansas State University have favorable impressions of their fellow students, of the faculty in their major field, and of the educational support offered by their department. However, there was a substantial diversity in departmental results. Significant negative departures from the University norm are signals that some feature in the educational design may not be functioning as well as intended. Significant positive departures are also signals; those responsible for such signals should be encouraged and reinforced. Each department should examine its own results carefully.

This report is intended to assist in ascertaining why some outcomes may be especially favorable or especially disappointing. It is important to compare the types of outcomes reported by former students and the types of recommendations they make with information about their goals and the environment they experienced.

These former students indicated a strong career motive for attending college. Not surprisingly, they valued practical and applied education. While the record of success which they have compiled is encouraging, the tendency for their postcollege development to be somewhat narrow and career-oriented is entirely consistent with their personal preferences and with the KSU environment which they perceived. To the degree that faculty and administrators endorse broader educational goals and objectives, it will be important to realize that progress toward such goals may require prior efforts to enlarge student expectations and educational appetites.

In any event, this report is intended as much to raise questions as to answer them. Educational outcomes and processes are much too complex to capture with exactitude or finality by either surveys or standardized examinations. Nonetheless, those responsible for designing educational experiences and setting educational standards must make inferences about the effectiveness of existing practices and conditions. These reports, when examined with other evaluative information in an atmosphere of constructive appraisal, can be of considerable assistance to curriculum planners.

The surveys will continue to be administered to one-half of the colleges every two years. Results will normally be provided within six months of the final survey administration period, giving departmental planners ample time to study them and implement changes whose effectiveness can be inferred by comparing current results with those reported four years hence.

Since each college has been surveyed at least three times, survey results can be used to assess the impact of changes that were instituted in recent years.