Retention begins with student recruitment and admission.

Campus Perceptions of Students: Implications for Strategic Planning in Black Student Recruitment and Retention

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Introduction

"What do we have to do today to be ready for an uncertain tomorrow?" asks Peter Drucker (1974, p. 125) in his discussion of strategic planning. Considering the decline in the numbers of traditional college students (Hodgkinson, 1985) and the relationship between academic success and satisfaction (Steele, 1978), it becomes important that educational leaders raise such a question as they examine institutional effectiveness from students' perspectives. Finding answers to these questions would provide educational administrators with meaningful direction in serving students.

First-year, undergraduate students form the group with the largest withdrawal rate—in numbers and percentages—from colleges and universities across the country (Ihlanfeldt, 1986). Hegner (1981) reported that over 300 colleges and universities in the United States had an attrition rate of over 50 percent for their first-year students. Between the fall of 1981 and the fall of 1982, 32 percent of the "first-time freshmen" withdrew from Kansas State University (Kansas State University, 1986). Lynch indicates that in 1984, the attrition rate for first-year students in the College of Arts and Sciences at Kansas State University was 35 percent, which exceeded the rate for all first-year students at the university (31 percent) and is more than one and one-half times the attrition rate for the entire student body.

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On the other hand, nationally, Black student enrollment at four-year colleges peaked in 1980 at 633,000 and declined in 1982 to 611,000 (Arbeiter, 1986). A research report conducted for the College Board indicates that "Black students, compared to all students, continually lose ground in their progress through the educational pipeline . . . For example, in 1972 Blacks represented 12.7 percent of all 18 year olds, 10.5 percent of all 1972 high school graduates, 8.7 percent of all college freshmen, and four years later, 6.5 percent of all B.A. recipients" (Darlington–Hamilton, 1985, p. 1). At Kansas State University, Black student enrollment declined from 450 in Fall of 1983 to 426 in Fall of 1986, representing a five percent drop. At the end of the spring semester 1985, 51 percent of the Black students enrolled at the University were in academic difficulty. While not the only influence in student attrition, a student's grade point average is strongly related to persistence (Astin, 1975).

Perceptions, Images and Satisfaction

"More often than not, people respond to their perceptions rather than to reality" (Hayakawa, 1970; Kotler, 1975). Police forces, for example, might think that they are fairminded, effective, and inaccessible (Kotler, 1975). Much more than a result of public relations planning, institutional image is largely a function of what an institution does, its credibility rooted in behavior and not merely words. "Images differ in their clarity and complexity" (Kotler, 1975, p. 131). Under the philosophy of enrollment management, "the ultimate goal is to recruit matriculants who will find attendance at the institution satisfying, stimulating, and growth-producing" (Hossler, 1984, p. 6). Most students, however, do not have clear expectations of a college or university and, consequently, make poorly informed decisions (Feldman and Newcomb, 1969; Jackson, 1980; Litten, Sullivan, and Brodigan, 1983; Stern, 1965).

Enrollment Management

An effective enrollment program—research, market plan, pricing, communication, and assessment—will be reinforced by what students experience and will help clarify the image of the institution to the public (Keremer, 1982). "The result should be a closer match between the institutional offerings and the expectations of potential students, resulting in higher yields of admitted student applicants and lower attrition rates for enrolled students" (p. 68). Institutional fit or match, according to Hossler (1984), exists when students' needs, goals, and interests are adequately met by various environmental conditions, and when students' academic and social abilities mesh well with institutional requirements. Several researchers believe that a match between the student and the institution increases the student's persistence (Creager, 1968; Feldman and Newcomb, 1969; and Painter and Painter, 1982). Other studies have focused on aspects of interaction between campus environment and students: Brown, 1968; Lauterbach and Vielhaber, 1966; Morrow, 1971; Nafziger et al., 1975; Pervin, 1976; Walsh and Russell, 1969 (Hossler, 1984). Although the research both supports and rejects the basic congruency hypothesis between institutional fit and student satisfaction, notes Hossler, many researchers agree that "the research in general does support the link between fit and increased student satisfaction with the institution, greater academic achievement, and enhanced personal growth (Walsh, 1978; Huebner, 1980; Lenning, Beal and Sauer, 1980)" (Hossler, 1984 p. 71).

Retention begins with student recruitment and admission (Wilder, 1983). Persistence can be enhanced if institutions develop programs that match students' educational

needs, interests, abilities, and goals with the institutional curriculum.

Student Satisfaction

Although admissions information, personal contacts, campus visits, and expectations are important factors in the adjustment of students to the institution, educational leaders, however, frequently overlook student satisfaction (Astin, 1975). Nevertheless, the foundation of institutional marketing includes asking, "To what extent are students satisfied with their experience at our institution?" (Ihlanfeldt, 1980, p. xii). Motivation and satisfaction within the role of the institution can contribute to the institution's effectiveness. Of course, a concern for student satisfaction may alarm academic purists who sometimes feel that, in their attempts to satisfy students, institutional leaders might compromise the standards of institutions (Wilder, 1983). Yet, student satisfaction has nothing to do with awarding students blanket "A's" or undeserved credit. "It simply means that members of teaching faculty should do their best for their students (Hale, 1973)," writes Wilder (p. 7).

Stark, Terenzini, and Trani (1978) write that students need answers to the pertinent question: "What is likely to happen to me if I enroll at this institution?" (p. 1). Accordingly, in the analysis phase of strategic planning, the institution assesses its internal environment and external environment, focusing on student enrollments and revenues, the values and styles of the administration, student and faculty values and characteristics, the strengths and weaknesses of the institutions, studies of institutional operations, and planning strategies (Uhl, 1983). Educational researchers should get "quantifiable and pragmatic answers" (Johnson, 1979, p. 3).

"Market research discovers the values, attitudes, and priorities of groups concerned with outcomes of college performance: the college's students, board members, and support constituencies, as well as the general public" (p. 12). Similarly, Astin and Scherre (1980) write, "If we can accept the premise that improving the educational environment is a major objective of college administration, it follows that college administrators rarely receive appropriate information about the results of that policy . . . like artists learning to paint blindfolded or musicians learning to play the violin with their ears plugged" (p. 149). Gaither (1979) provides an additional perspective:

"Students are often recalcitrant in voting either at the polls or on programs until the situation becomes highly intolerable. The student is far more tolerant of poor services and quality in education, it seems, than in the profit-centered marketplace" (p. 33) " . . . In order to meet students' expectations, however, an institution must know what these expectations are, whether the students' image of the institution is accurate, and whether it will "sell" students on attending and remaining . . . .What is important here in student marketing is that the institutional researcher needs to assess the institution's personality and press as well as the needs and desires of potential and current students" (pp. 34–35).

Bruce (1978) recommends that current satisfaction studies, attitude surveys of students, alumni, the local community, and even the faculty be made to determine the degree to which their needs are being met by the institution. Typically, researchers survey only those students who are accepted for enrollment in the university (Ihlanfeldt, 1980). "The purposes are to acquire some understanding of the demographic profile of the students interested in the institution and to obtain information about factors that influenced the application process" (p. 39). Yet, The Carnegie Founda-

tion for the Advancement of Teaching (1975) suggested that in planning, an effective strategy could be formulated only after a careful analysis of the college's or university's condition, posing questions about the environment of the college—its strengths, weaknesses, and role.

The image of the institution may well vary among its many constituencies; yet, assumptions go unchallenged. The image may be real or imagined, but in either case the image is perceived. As sociologist W.I. Thomas noted in the 1930s, "if a stick is perceived as a snake, the resulting responses are the same" (Gaither, 1979, p. 55).

This study investigated whether or not first year, undergraduate Black students and White students differed significantly in their perceptions of campus environment. The conceptual foundation was developed from theories of campus environment in enrollment management by Hossler (1984), Ihlanfeldt, (1980) and Kotler (1975), and other related research by Astin (1975). The instrumental objective of this study was to identify organizational characteristics that have implications for policy development and strategic enrollment planning by comparing campus perceptions of first-year, undergraduate students enrolled in the College of Arts and Sciences at Kansas State University, a midwestern, open-enrollment, land-grant institution.

The Research Question

Considering the projected decline in college youth and increase in Black youth in the next decade and a half (Hodgkinson, 1985), and considering the recent wave of racial intolerance on college and university campuses across the country in the past two years (Evans, 1987; Schatzman, 1987), an analysis of campus environment would reveal information useful for strategic planning. Specifically, this study asked, "Is there a significant difference between Black first-year students and White first-year students in their perceptions of campus environment?"

Method

Subjects were 157 first-year, undergraduate students enrolled in the College of Arts and Sciences at Kansas State University in the spring of 1987. Data on racial and sexual characteristics are presented in Table 1.

Table 1
Sex and Race of Students by Entire Sample

Sex	Number in Study	Number Enrolled	Percent of Study	Percentage of College Arts & Sciences Freshmen
Men	66	304	42	22
Women	91	396	58	23
TOTAL	157	700	100	22.4

Sex	Number in Study	Number Enrolled	Percent of Study	Percentage of College Arts & Sciences Freshmen
Asian	2	11	1	0.29
Black	23	55	15	3.29
Hispanic	2	22	1	0.29
White	130	612	83	18.57
TOTAL	157	700	100	22.44

Table 1 shows that 66 male students (42%) and 91 female students (58%) participated in the study. Since 304 first-year men and 396 first-year women were enrolled in the College of Arts and Sciences, 22 percent of the men and 23 percent of the women first-year students in the College of Arts and Sciences participated in the study. A proportional, stratified sampling was made of men and women subjects. A total of 294 questionnaires were mailed (159 to women and 135 to men). Sixty-six men and 91 women returned questionnaires. Table 1 also shows that 2 Asian, 23 Black, 2 Hispanic, and 130 White first-year, undergraduate students participated in the study. Because of their low numbers, Asian and Hispanic subjects were not included in the statistical analysis by race. Thirty black students met the criteria for participation, and 23 participated, representing 15 percent of the students in the study. White students participated at approximately 19 percent of the total enrollment of first-year students in the College of Arts and Sciences. Overall, the subjects represented 23 percent of the first-year, undergraduate students in the College of Arts and Sciences.

Instruments

Measuring environmental perceptions has long been a concern of researchers in planning. The Organization Climate Index (Stern, 1970) measures environments in educational and industrial settings; The College and University Environment Scale (Pace, 1969), the Institutional Functioning Inventory (Peterson, et al., 1970, 1983), and Moos' Social Climate Scales (1974) can be helpful in understanding social environments and for institutional self-evaluation. This research developed a survey questionnaire after referring to instruments constructed by Moos (1974), Pace (1969), and Peterson and others (1970) measuring climate. The questionnaire in this study collected the perceptions of students, minimizing the use of unnecessarily descriptive language, adjectives, and adverbs whenever possible. The instrument examined several dimensions of the campus: Community, Administration, Awareness (Peterson et al., 1970) and Scholarship (Peterson et al., 1970). Closed-ended sentences (42 items) using Likert scaled responses and open-ended questions (two items) were used.

Sentence questions were measured for internal consistency using Cronbach's coefficient alpha. **The University Perception Scale** (Salahu–Din, 1987), the instrument used in this study, revealed a reliability of 0.8373. A score of 1.0 indicates perfect reliability (Borg, 1979).

Independent Variables

Perceptions of first-year students were examined comparing responses of Black students and White students. Black students were grouped and White students were grouped, forming the independent variables along students' characteristics of race.

Dependent Variables

For sentence questions, the dependent variable, perceived campus environment, was measured by the composite of 42 items using five-point Likert scales. Open-ended responses were categorized and ordered according to four dimensions of campus environment: community, administration, awareness and scholarship.

Community is concerned with attitudinal factors and interaction: friendliness and cohesiveness, congeniality and loyalty (Pace, 1963). In this definition, democratic governance and institutional esprit (Peterson, 1970) are included. "The campus is a community," writes Pace (p. 24).

Administration focuses on procedures and systems, order and supervision (Pace, 1977). Peterson's (1970) self-

study and planning, and concern for innovation are included in this definition. The essential question is, "How well does the institution work?"

Awareness examines the concern for and emphasis of personal, poetic, and political inquiry—"a search for personal meaning" (Pace, 1977, p. 25). Peterson's "human diversity" is included in this definition.

Scholarship explores the academic and scholarly environment. Academic achievement, serious inquiry, and rigor and vitality in the pursuit of knowledge are emphasized (Pace, 1977). Peterson's "intellectual–extracurriculum" and "concern for undergraduate learning" are elements of this focus.

Statistical Analysis of Data

One hundred fifty-seven questionnaires were coded and tabulated using the SPSS-XX Batch Systems (Norusis, 1985). Data for sentence statements were analyzed using a t-test for two independent samples and a multivariate analysis of variance on interesting items from each dimension. Responses to open-ended questions were categorized, grouped by dimension (Community, Administration, Scholarship, and Awareness), and rank-ordered.

Results

This study asked, "Is there a significant difference between Black first-year students and White first-year students in their perceptions of campus environment?" The results of this study indicate that Black first-year, undergraduate students and White first-year, undergraduate students had significantly different perceptions of campus environment.

Although neither group was negative about the University, Black students were less positive (mean = 2.7298) about the University than were White students (mean = 2.5744). If a score of one is taken as a positive response, a score of three as neutral, and a score of five as negative, then both groups gave somewhat neutral responses, although significantly different, **t** (151) = –2.20, **P** < .05. An examination of students' responses to open-ended questions reveals that, although both Black students and White students found the campus to be a Community that met their expectations prior to enrolling on campus, Black students were most disappointed with Awareness on campus. It is somewhat ironic that in their semester of study only one Black student and one White student found the level of Awareness at the campus approximating their previous expectations. Concerning unmet expectations, six percent (5/79) of the White students and 53 percent (9/17) of the Black students were disappointed.

Profiles of responses to select survey items (#43 and #44) by race and sex.

Students' responses to their met and unmet expectations were categorized by areas of concern, grouped by dimension, and then rank-ordered. The first response from each student was tabulated.

In the dimensions of met expectations, no apparent differences were found when responses were rank-ordered. Whether grouped by sex or race, students' compliments focused on Community as the University's stronger area. Thirty-eight percent (8 of 21) of the responses from Black students complimented Community, and fifty-six percent (54 of 96) of the responses from white students complimented Community. Fifty-three percent (38 of 72) of the female respondents indicated Community as the area of greater satisfaction, and fifty-four percent (25 of 46) of the male respondents were satisfied with Community.

Table 2
Profile of Met and Unmet Expectations by Race and Sex

Profile by Race

Group	Dimension	Met Expectations N	%	Dimension	Unmet Expectations N	%
Black Students	Community	8	38.10	Awareness	9	52.94
	Scholarship	7	33.33	Scholarship	5	29.41
	Administration	5	23.81	Administration	2	11.76
	Awareness	1	4.76	Community	1	5.88
	TOTAL	**21**		**TOTAL**	**17**	
White Students	Community	54	56.25	Scholarship	39	49.37
	Scholarship	30	31.25	Administration	33	41.77
	Administration	11	11.46	Awareness	5	6.33
	Awareness	1	1.04	Community	2	2.53
	TOTAL	**96**		**TOTAL**	**79**	

Group	Dimension	Met Expectations N	%	Dimension	Unmet Expectations N	%
Female Students	Community	38	52.78	Scholarship	28	50.00
	Scholarship	26	36.11	Administration	22	39.29
	Administration	7	9.21	Awareness	4	7.14
	Awareness	1	1.32	Community	2	3.57
	TOTAL	**72**		**TOTAL**	**56**	
Male Students	Community	25	54.35	Scholarship	18	42.86
	Scholarship	12	26.09	Administration	14	33.33
	Administration	8	17.39	Awareness	10	23.81
	Awareness	1	2.17	Community	0	0.00
	TOTAL	**46**		**TOTAL**	**42**	

In the dimensions of unmet expectations, however, black students were most disappointed with Awareness, which received 53 percent (9 of 17) of the responses. White students were dissatisfied with scholarship, which received 39 of 79 complaints (49 percent). Both men and women students indicated scholarship as the area in which they were most disappointed. Fifty percent (28 of 56) of the women, and 43 percent (18 of 42) of the men students were dissatisfied with Scholarship at the University. Table 2 is a profile of met and unmet expectations by race and sex.

A Composite of Campus Environment

This section presents data resulting from overall analyses of campus environment measured by composite analyses of sentence questions. Data are displayed in Tables 3 and 4.

T-test for Two Independent Means. A t-Test for two independent samples was used to determine if a significant difference existed between White first-year, undergraduate students and Black first-year, undergraduate students in their perceptions of campus environment. Table 3 shows a significant difference between Black first-year, undergraduate students and White first-year, undergraduate students in their perceptions of campus environment, $t (151) = -2.20$, $P < .05$. Results indicated that black students were less satisfied with campus environment than were White students.

Although the numbers in each group are different, the t-test is robust and insensitive to even flagrant violations of the assumptions of normality (Keppel, 1982; and Runyon and Haber, 1984). However, since each group had widely differing numbers, particular attention was paid to the assumptions of equal variance. Pooled variance estimates, 0.924, were used to estimate the t-value for two-tailed probability, $P = 0.029$. Homogeneity of variance was not violated.

Table 3
t-Test for Two Independent Samples
Comparing Mean Scores Between Black
and White First-Year, Undergraduate
Students on Campus Environment

Group	N	Mean	t	df	P
White	130	2.5744	–2.20	151	0.029*
Black	23	2.7298			

*P < .05

Multivariate Analysis of Variance

Multivariate analyses of variance were administered on interesting, representative questions by race, which indicated significant differences.

Table 4 shows that significant differences existed among the perceptions of black students and white students concerning campus environment.

As shown in Table 4, the MANOVA on these scores indicate significant differences between the campus perceptions of Black first-year, undergraduates and White first-year, undergraduates. Unvariate F-tests indicated significance on survey items #26 ($P < .0005$) and #28 ($P < .05$). The items are: #26: "K-State attracts students of diverse ethnic and socioeconomic backgrounds."; and #28: "People here rarely read or discuss serious matters."

Stepdown F-tests revealed significance ($P < .0005$) concerning the attraction of students with diverse ethnic and socioeconomic backgrounds, item #26.

Table 4
Results of Multivariate Analyses of Variance by Race

Test	F	Between DF	Within DF	Sig. of F
Pillais	4.37333	9.00	143.00	.0005*
Hotellings	4.37333	9.00	143.00	.0005*
Wilks	4.37333	9.00	143.00	.0005*

*P < .0005

Results of Univariate F-tests (DF = 1,151)

Survey Item	Between SS	Within SS	F	Sig. of F
Question 6	2.81102	172.71839	2.54755	.119
Question 7	.07320	116.98562	.09449	.759
Question 8	2.86081	127.11304	3.39841	.067
Question 21	3.63762	182.12709	3.01592	.084
Question 22	.02597	70.53612	.05560	.814
Question 26	15.94728	112.26187	21.45019	.000*a
Question 28	3.34485	114.82508	4.39863	.038*b
Question 33	.21143	182.42910	.17500	.676
Question 35	.47062	138.16990	.51432	.474

*P < .0005
*P < .05

Results of Roy Bargman Stepdown F-tests

Survey Item	Stepdown F	F	Within F	Sig. of F
Question 6	2.45755	1	151	.119
Question 7	.05084	1	150	.822
Question 8	3.30545	1	149	.071
Question 21	2.39000	1	148	.124
Question 22	.00004	1	147	.995
Question 26	24.92610	1	146	.000*
Question 28	3.56157	1	145	.061
Question 33	.02904	1	144	.865
Question 35	.94707	1	143	.332

*P < .0005

Limitations

This study was conducted at a midwestern, open-enrollment university and generalization to other populations should be made with caution. Interpretations of students' responses are dependent on a particular institution's purpose or mission.

Discussion

These results are not surprising since the University's reputation for friendliness has been and continues to be heralded across Kansas and adjoining states. Nevertheless, two plaguing areas are the respondents' concerns with (1) Scholarship and (2) Awareness. Considering a shrinking pool of prospective students and that approximately one-fourth of the students who enroll at the University graduate in five years, administrators might re-examine the mission of the land-grant university.

1) To strengthen artisan, agricultural, and laboring classes.

2) To improve and update competition with other countries.

3) To induce the citizens, sons and daughters of citizens, to remain in the state. Keep people home (Litz, 1985).

Mindful of the University's purpose, its characteristics

and educational outcomes, if Kansas State University is to increase its effectiveness in recruiting and retaining students, students must be better assisted in obtaining their goals. While the revelation of significant differences in students' perceptions in itself is not startling, such information could be of value in determining a direction for the organization. In recruitment, for example, two conditions are necessary for establishing a positive school environment for minority students:

1) numbers of minority students

2) numbers of minority faculty and administrators (Reed and Dandridge, 1979)

Black students must believe that they have opportunities and support (Fleming, 1984; Willie, 1972). "Completed studies underscore the need for more Black faculty and staff members, a maximum number of Black students with a balanced sex ratio, curricula relevant to the Black experience, and responsive counseling services" (Fleming, 1984, p. 156).

As mundane as it may seem, it might be mentioned that most students come to college to get an education. Not being able to interact with teaching faculty and advisors effectively is frustrating. An effective strategic plan would insure that Scholarship is one of the more satisfactory areas on campus rather than an unsatisfactory area.

Conclusion

The results of this study provide significant support for strategic planning in enrollment management, particularly for recruiting and retaining ethnic minority students. Future research may be directed to several questions: Are there gender differences in the perceptions of ethnic minority students regarding campus environment? How do minority students' perceptions of campus environment change as they progress through their programs: first year, second year, third year, fourth year, and fifth year? Do minority students having different levels of academic success have different perceptions of campus environment? Do minority students having different levels of financial assistance from the university have different perceptions of campus environment? Answers to these questions would provide educational administrators direction in serving students.

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