Also in this issue

Building Community: Communication Patterns and Student Involvement on a Metropolitan Campus

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Abstract

Colleges today see extra-curricular activities as ways to improve student retention and enhance the collegiate experience. This study examines student involvement, including participation in college activities, using campus facilities, communication patterns and campus friendships. Key predictors of involvement are identified from demographics, individual constraints and student values. Involvement is positively related to academic values and negatively correlated with personal constraints. Campus communication patterns and using university facilities are key predictors of institutional assessments and attitude in multiple regressions conducted.

In recent commentaries, college students today trail former generations in their level of involvement on campus. A host of explanatory factors can be raised. First, students face higher tuition and are more likely to hold jobs, thus leaving less time for anything other than coursework. Second, students are more career-oriented and, consequently, are more likely to shun activities that don't advance their long-term professional or occupational goals. Third, students take longer to matriculate today, so they are often older than previous generations and more likely to have family responsibilities that occupy their time outside of class. Fourth, perhaps following their parents' models, they are less likely to be "joiners"—they, too, are "bowling alone." Baird (1990) found in a study of forty-two colleges that most students were involved primarily in studying and class work and did not engage in many extra-curricular activities.

Student involvement on campus is not a trivial matter. Colleges themselves see extra-curricular activities as a way to improve student retention (Webb 1987; McNeal 1995) and enhance the college experience itself (Parker and Moore 1986). Efforts to improve student involvement also are targeted at minority groups and under-represented populations (Ringgenberg 1989; Taylor and Howard-Hamilton 1995).

Literature suggests that involved students are more likely to graduate, to feel "good" about their college experience, and to retain such feelings upon graduation. One study

of undergraduates found that students involved in campus activities liked to feel in control of life events, a desire also related to a concern for well-being and self-esteem (Madden, Woods, Dares-Hobbs, and Collins 1987). In addition, some involvement in activities and use of campus facilities is necessary for academic achievement or reinforces the learning process. Anaya (1996) found in a survey of 2,281 students in 1985 and 1989 that student involvement in learning activities and environments most directly related to learning outcomes enhanced learning (Gholson 1985; MacKinnon-Slaney 1993). Astin (1984, 1985) proposes a theory of student involvement defined as the quantity and quality of physical and psychological energy the student invests in the college experience. According to the theory, the effectiveness of any educational policy or practice is directly related to its capacity to increase student involvement. Spady (1971) studied students when they were in high school and after they had entered college, finding that the effect of participating in extra-curricular activities in high school was linked to realizing college goals beyond the influence of grade performance, motivation and peer status. Friedlander and MacDougall (1992) identify strategies to increase student involvement, stressing the importance of student contacts with faculty and out-of-class activities. A research project at the University of Rhode Island gathers information on student interests and involvement in extra-curricular activities and correlations with student confidence and sense of belonging (Morrissey 1991). Moore and his colleagues (1998) identify significant gaps in research regarding how college student involvement affects their development and learning.

Clearly, we need to understand more about student involvement. Student involvement in activities has been measured in a variety of ways; Winston and Massaro (1987) provide one inventory. Organizations themselves represent one way for students to be involved on campus. Taylor and Howard-Hamilton (1995) found that African American males who participated in Greek-letter organizations tended to embrace a stronger, more positive sense of self-esteem and racial identity than did their non-Greek counterparts. Greek life plays an instrumental role in retention because students who are involved in campus life are less likely to leave (Reisberg 2000).

Friendship networks are another vehicle for involvement on campus. In Nagasawa and Wong's (1999) theory to explain survival of minority students in college, ethnic social networks serve to reinforce excellence in academics, provide social support and information, and increase solidarity and pride in members. They also help integrate minority students into the college social and academic systems and maximize their chances for survival in college. Students also use a host of campus facilities. On-campus students are more likely to use the most, while those living off campus are more likely to use the least. Thus, use of campus facilities and resources is one measure of student involvement.

Communication variables are instrumental influences increasing student involvement as well as measures of involvement. In the case of the former, communication is the process through which students are informed of the opportunities for getting involved on campus. In the case of the latter, the strength of the pattern of communication linking students to each other, as well as to their professors and administrators, is a measure of involvement.

In addition to "generational" factors, there also are environmental influences and individual differences that affect students and their involvement on college campuses. Whether or not students live on campus or commute is a factor. In one study, freshman grades of off-campus students were higher than those of on-campus students (Grayson 1997). Tinto and Goodsell-Love (1993) examine programs to promote commuter student involvement and achievement. The nature of the educational environment represents a "pull" factor affecting student involvement. Schlossberg (1989) offers the concept of a "mattering environment" in which students feel marginal or that they matter; this is linked to student involvement in learning. The community involvement can be both a positive or negative influence on student involvement. Thus, college students in larger cities and metropolitan areas have more attractive off-campus options for their leisure-time activities outside of class. Secondly, the size and nature of the campus—whether it's a two-year, four-year, or comprehensive graduate institution—can affect student involvement (Watson and Kuh 1996). In an earlier study of eleven institutions, Chapman and Pascarella (1983) found that overall campus climate explained significant but modest amounts of variance in student participation in campus activities that define campus life. Although dealing with secondary schools rather than colleges, Nelson (1973) found that smaller schools fostered higher rates of participation in extra-curricular activities than did larger institutions; this might extend to higher education.

Furthermore, we would expect individual differences in student involvement as they move through their college careers; that is, freshmen, seniors, and graduate students have different concerns and goals.

Here we will examine student involvement beyond merely looking at whether students participate in college organizations and activities. We will look at use of campus facilities, communication patterns, friendship patterns, and a variety of individual factors that include personal and environmental constraints (family, work, commuting constraints) as well as individual goals and perceptions (e.g., the relative importance of different domains in their lives, including college, family, work).

Our study examines the various social categories, personal values and indicators of environmental constraints, attitudes toward the institution and other measures to see how they predict student involvement on campus.

The following research questions are raised:

1. What is the relationship between measures of student involvement and social categories, individual constraints, family and job constraints, and student values?

2. What is the relationship between institutional assessment and social categories, individual constraints, family and job constraints, and student values?

3. What is the relationship between attitude toward the university and social categories, individual constraints, family and job constraints, and student values?

4. How important are measures of student involvement as predictors of institutional assessment and of attitude toward the institution?

Methods

A telephone survey of 465 students at an urban university in a Midwest metropolitan area was conducted in June, 1999 from a random sample of students enrolled at the institution during the spring semester. The sample was drawn by the university's institutional research office and results were loaded onto a CATI (computer-aided telephone interviewing) system. Respondents included undergraduate, graduate and law students. Interviewing was done using the CATI system in the Communication Research Center. The response rate was 72 percent.

Many of the items used to measure concepts were borrowed from other studies, but others had to be tailored to the specific urban campus and student body. In addition, some items were generated in focus groups and the entire set was used in other studies and pretests. The interview schedule includes items measuring the following variables.

Institutional Evaluation—A total of eleven items asked students to evaluate everything from the quality of courses in one's major and the overall quality of teaching encountered at the university to the availability of computers on campus, the availability of faculty outside of classes, instruction on use of library resources, the ease of registration for classes, the relevance of university requirements, the availability of information about student organizations and their activities, the quality of services provided by the career center, college advising, the availability of parking on campus, and the quality of food in the school cafeteria. Students used a 0-10 scale to indicate their satisfaction, with 10 meaning they were "completely satisfied," 5 was neutral or don't know, and 0 meant they were "completely dissatisfied." Responses to the eleven items were standardized and a summary constructed to reflect an overall evaluation. The alpha was .71 for this scale.

Student Activity and Use of Facilities on Campus—Five items solicited campus facilities use including using the library for study or research, using a computer lab on campus, having coffee or soft drinks in the commons area, using one of the student lounges in the student center, and eating in the cafeteria. Students used the following scale: almost every weekday, a couple times a week, once a week, about once a month, less often, almost never. A separate item asked how many days each week students came to campus. Responses to each item were standardized and a summary scale computed. The alpha was .61 for this scale.

Students were asked if they belonged to any organizations on campus and two items soliciting how many university sports events and how many plays, concerts, or art exhibits they visited at the university in the past year; responses to these two items were standardized and added for an index. Since these two items do not measure the "same" phenomenon, an alpha is an inappropriate measure. However, the two variables are correlated ($r=.23$, $p<.001$). Two additional items tapped the importance of

socializing on campus; students used a 0-10 scale (10=completely agree, 5=neutral/don't know, 0=completely disagree) to indicate how much they agreed with the following two statements: (1) My home and family life demand so much that I don't have time to socialize at school, (2) My job leaves me with little time to socialize at school. These two items were standardized and the alpha was .79 for this constructed scale.

Student Interaction and Interpersonal Communication—Seven items and two response sets were used to learn how often students interacted with other students on campus in different contexts. Students used a six-point scale (almost every weekday, a couple times a week, once a week, about once a month, less often, almost never) to indicate how often they engaged in the following: (1) chatting with other students between classes in a lounge or while sitting outdoors on campus, (2) socializing with other students after class at a nearby restaurant or bar, and (3) joining study groups on campus. These three items were joined by four others in which respondents used the 0-10 response scale (10=completely agree, 5=neutral/don't know, 0=completely disagree) to indicate agreement with the following statements: (1) I often talk with other students about classes or professors; (2) I often talk with other students about current events and things happening in the news; (3) I often have involved discussions about concepts and ideas with other students outside of class; and (4) I often talk with other students about such things as movies, TV, shows or music. Responses to each of the seven items were standardized and a summary score computed to indicate strength of interpersonal communication across the different campus contexts; the alpha was .75 for this scale. Two items also solicited satisfaction with the availability of information about school events such as athletics and plays or concerts using the same scale; the alpha was .71 for this scale.

Friendship Patterns and Attitudes toward Other Students on Campus—Several items solicited friendship patterns and attitudes toward other students on campus. Students were asked where they lived (on campus, nearby, at home with parents, elsewhere). One item asked if they knew someone who lived on campus and whether most of their friends attended the university, indicating the strength of friendships centered in families, jobs, neighborhoods, and links before going to college. These items are examined as individual variables.

Students also were asked to use the same 0-10 scale (10=completely agree, 5=neutral/don't know, 0=completely disagree) to indicate how much they agreed with three statements designed to tap their attitudes toward the institution's students in general, while a fourth item asked about how the university compared with their community environment: (1) University students on the whole are friendly, (2) I find it easy to talk with people from different ethnic backgrounds at (the university), (3) it's difficult making friends at (the institution) [order of scale reversed for comparability]. Again, items were standardized with an alpha of .45 for this summary scale.

Macro Involvement Scale—A Macro Involvement Scale was computed using the standardized items from the major scales including: (1) five items measuring student

use of campus facilities, (2) two measures of attendance at athletic and other campus events, (3) seven measures tapping university communication patterns, and (4) three measures of university friendship patterns. The alpha was .70 for the macro involvement scale.

Attitude toward the University—Four items were used to tap attitudes toward the university with students using the 0-10 scale to indicate how much they agreed with each of the following: (1) I feel comfortable at (the university), (2) I am proud of the education I'm receiving at (the university), (3) I have positive feelings toward (the university), and (4) Most people in (the city) don't realize the quality of an education at (the university). Responses to these items were standardized and a summary score computed; the alpha was .74 for the scale.

Values and Importance of Education—Five items were used to obtain the importance of education and other domains of students' lives. The items tap importance of family, job and education and do not constitute a scale or index. Some of the items are related to each other, as we'd expect, but they do not scale as a group (alpha = .42). Enjoying school is correlated at .57 ($p<.001$) with enjoying discussion of ideas and intellectual stimulation provided by college. In a factor analysis those two items load on one factor, while the importance of family and the importance of job load on a second factor. Getting a job as a priority does not load on either factor. We decided to treat the items individually as indicators of particular values to avoid losing the distinction between the emphasis on intellectual matters and mere enjoyment of college. Respondents used the same 0-10 scale to indicate how much they agreed with the following statements: (1) The most important thing in my life right now is my family, (2) My job is one of the most important things in my life right now, (3) I enjoy going to school, (4) Getting a good job after college is my top priority, and (5) I enjoy discussing ideas and the intellectual stimulation college provides. These variables were examined independently of each other.

Technology Use—One section of the survey focused on technology. Students were asked if they have access to a computer at home and at work. They also were asked how often they use the Internet, for work or for pleasure: several times a day, about once a day, a couple times a week, once a week, less often than that, never or almost never. Respondents also were asked to use the same scale to indicate how often they use email to send or receive messages on a regular basis. A scale was constructed based on computer access and use of the Internet and email with an alpha of .66 resulting.

Results

A profile of the sample of 465 respondents shows that 7.5% were freshmen, 13.1% sophomores, 20.4% juniors, 20.9% seniors, 29% graduate students, 4.3% law students, and 4.7% occasional students or other status. Some 45% were in the College of Arts and Sciences, while 25.7% were in the College of Business, 12.5% in the College of Education, 9% in the College of Engineering, 2.8% in the College of Urban Studies, and 4.9% other or missing information. The percentages reflect available university

data in terms of full-time status, age, marital status, gender, and other factors, providing additional validity to the sample.

Some 45.8% of students said they took spring semester classes only during the day, while 35.1% went nights and 19.1% both day and night. While 43% said they were part-time students, 57% said they were full-time students. Some 22.3% of students were age 17-21, 23.6% age 22-25, 21% 26-30, 10.8% 31-35, 7.1% 36-40, 8.7% 41-45, 3.7% 46-50, and 2.8% age 51 or older. Some 65% of students in the sample are single and have never been married, while 30% are married, 4.3% separated or divorced, and .6% widowed. Some 27% said they had children living at home. Some 86% work at a job outside the home, and of these a fourth work more than 40 hours a week, another fourth 30-40 hours, a fifth 21-30 hours, and a fifth 11-20 hours. Only 6% of those with jobs worked fewer than 10 hours a week. Some 42.2% of respondents are male and 57.8% female.

Bivariate Relationships

The first research question focuses on the relationship between measures of student involvement and social categories, individual constraints, family and job constraints, and student values. Most of the expected relationships are supported by the data. Thus, older students and those with children at home are less likely to be involved on any level, joining organizations or attending events, using campus facilities, or having friends who are fellow students. We also found that older students and those with families have weaker communication patterns linking them to the campus and are less involved overall.

Having a job outside the home does not appear to be a factor, but the amount of time worked is important—the more the hours, the lower the involvement. Similarly, students who go to school full-time are higher on almost all measures of involvement. Surprisingly, time spent commuting to campus is not a significant factor.

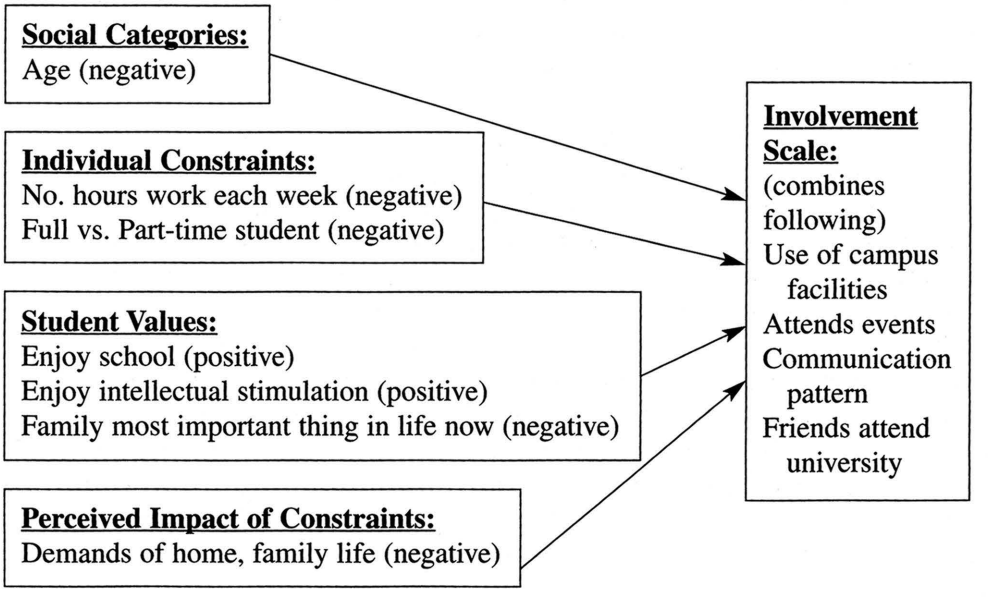
Several items solicited the importance of different aspects of one's life, and we find that students with quite different emphases for going to school still are involved; thus, those who enjoy school, those focusing on jobs after college, and those who enjoy discussing ideas and the intellectual stimulation college provides all are more likely to be involved at some level. When students focus on getting a job, they are more likely to have fellow students as friends and to belong to organizations and use campus facilities more. Students who emphasize the intellectual stimulation of going to college have stronger communication patterns linking them to campus and stronger overall involvement. Students who are family and job focused are less likely to use campus facilities as much, less likely to have friends on campus and less involved overall. The perceptions of job and family constraints on socializing are negatively associated with all forms of involvement on campus. An examination of inter-relationships between measures of involvement, including part-whole correlations among the items, shows that all are positively correlated, supporting "the more, the more" thesis that busy people do more of everything.

Predicting Involvement in Organizations, Attending Events

Next, we examined the extent to which the different individual and environmental constraints collectively affect involvement. A series of regressions was run predicting each measure of involvement using four blocks of variables entered sequentially in the following order: (1) social categories (age, years in the area, having children at home); (2) individual constraints (having a job outside the home, the number of hours worked each week, going to school full versus part-time, and time spent commuting to campus); (3) student values and priorities in life (three focusing on college, one on family and one on job); and (4) perceived impact of job and family demands on socializing at school (two items). Results of each of the five regressions can be obtained from the authors.

Regressions were run to predict five variables: use of campus facilities, attending events, student interaction and campus communication, having friends who attend the university, and the overall involvement scale. We find that the greatest explanatory power of the four sets of variables is found for the summary scale of involvement, where a fourth of the variance is accounted for by social categories, individual constraints, student values and the perceived impact of constraints on socializing at school. Next, we were able to account for 26% of the variance in the strength of one's communication pattern and 17% of the variance in use of campus facilities. The least satisfactory predictions are found for attending events on campus—including sports, plays, etc.—where we accounted for only 5% of the variance, and having a friendship network dominated by fellow students, where only 7% of the variance was accounted for.

Figure 1: Key Predictors of Involvement



We also see key predictive variables within each block. Thus, age is the key predictor in the block of social categories, and its impact is negative. Having a job and being full-time students are positive predictors, but the number of hours worked is a negative predictor in the next block, individual constraints. Of the five items reflecting student values in the next block, simply "enjoying" school is the most powerful predictor, and it's a positive indicator of involvement, as we'd expect. Students who focus on jobs are less likely to attend events, while students who enjoy college's intellectual stimulation are more likely to be involved overall and to have stronger communication patterns linking them to campus. Family focus is a negative predictor in three instances—using facilities, having college friends, and overall involvement. An emphasis on one's job is a positive predictor of a strong university communication pattern. In the last block, perceived impact of constraints on socializing at school and perceived home and family demands are negatively associated with the strength of one's communication linking students to campus and to the overall involvement scale.

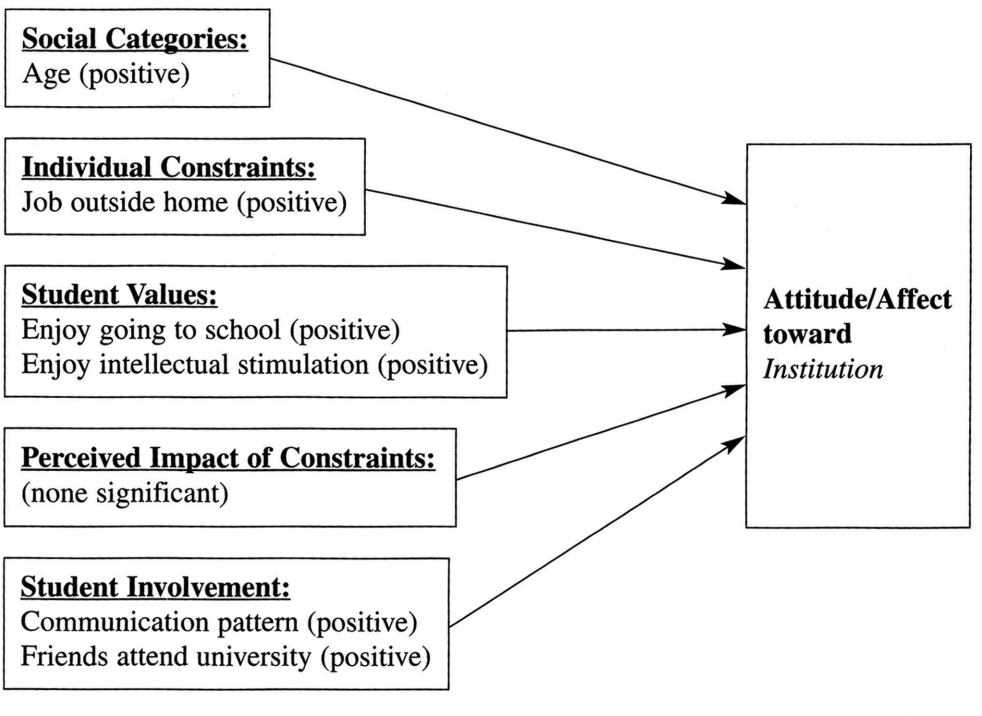
Predicting Student Institutional Assessments and Attitudes

The second and third research questions asked what the relationship is between two dependent measures—institutional assessment and attitude toward the university—and the same set of predictor variables: social categories, individual constraints, family and job constraints, and student values. Two scales tapped institutional evaluation and student attitudes toward their university. A set of items assessing the university included everything from parking and college advising to faculty availability and the quality of teaching. Four items measured attitudes and affect toward the university and the quality of the education it provides. The first reflects current assessments of university functions, while the second reflects the strength of one's affective link to the institution. An examination of the bivariate correlations between these two scales and the other variables shows that age is positively correlated with both institutional assessment and student attitudes toward the institution but that none of the other social categories or individual constraints is related. Four of the five student values are related to one or both of the two scales; thus, students who enjoy going to school, who enjoy college's intellectual life and who say family is the most important thing in their life right now gave higher evaluations of the university and had stronger positive attitudes toward it. Students for whom getting a job after college is more important, also gave more positive assessments of the university. Perceived family and job constraints on socializing were not related to either scale.

As we would expect, those who are heavier users of campus facilities give more positive university assessments, and those with stronger communication patterns linking them to campus gave both higher assessments and had stronger positive attitudes toward the university. The summary measure of involvement is positively related to both scales.

The fourth research question asked: How important are measures of student involvement as predictors of institutional assessment and of attitude toward the institution? Regression analysis was conducted to see to what extent the five blocks of variables predict institutional assessment and students' attitudes/affect toward their university. Again, social categories were entered as the first block, followed by individual constraints, student values, perceived impact of constraints on socializing, and finally, measures of student involvement. In both regressions, the blocks of variables account for about a fourth of the variance of the two scales. Student values account for most of the explanatory power in each of the two equations. Enjoying school and enjoying the intellectual stimulation college provides are key positive predictors of both institutional assessment and attitudes toward the university. Placing emphasis on getting a job after college is a positive predictor of institutional assessment but not of attitude toward the university. Of social categories, age is the major predictor of both scales, but the longer one has lived in the area, the lower the student's university evaluation. Having a job is a positive predictor of student attitude toward the university but the more hours worked, the lower the institutional assessment. Three of the five measures of student involvement are predictors of one of the two scales. Thus, heavier use of campus facilities leads to a more positive university assessment, while stronger communication and friendship patterns are positively related to student attitudes toward the institution.

Figure 2: Key Predictors of Attitude/Affect Toward the University



Discussion

Social categories and the environments that students face in their daily lives—working to put themselves through school, going to school part-time—are beyond the control of the institutions. However, universities can "appeal" to particular student values and emphasize those that are associated with student involvement. Furthermore, some of the measures of involvement may lend themselves to university programs that could fruitfully be pursued to enhance the college climate and lead to stronger involvement and, subsequently, more positive university assessments and attitudes.

Unlike generations past, today's college graduates can expect to have multiple careers, often in different fields. Furthermore, graduates working in technology-laden careers will be in need of continuing education. These factors suggest that the demographic landscape of college students is shifting.

Metropolitan universities would be wise to develop and implement programs that cater to students who remain relatively uninvolved with campus activities. For example, older students are attending colleges and universities in record numbers, yet the data here seem to suggest that they are far less involved in campus activities than younger students. Practically speaking, universities could cater to older students and students with families by offering a number of "family-friendly" services. These services could range from offering campus daycare services for parents of school-aged children to opening up campus facilities to families. Perhaps these students would become more involved in campus activities if their families could play an active role in the process.

Older students who work full-time and attend classes part-time might benefit from "satellite-involvement activities" offered in the areas where they work and/or live. Students with similar goals may be more willing to get involved with campus activities if some of them took place off-campus. Suppose the city of a large, primarily-commuter, urban university was "divided" into North, South, East, and West. The university could offer officially-sanctioned activities in each area. Perhaps it would be easier for these uninvolved students to become involved if the "campus" activities were taking place nearby.

Improving communication systems within a campus is a worthy goal for two reasons. First, an effective campus communication system aids student retention—a goal of every college and university in the country. Second, an improved communication system has shown to have positive effects on a student's overall college experience once he or she has matriculated (Carroll 1988; Pascarella 1985).

Several steps can be taken to help to improve the communication system within a campus. First, supplemental instruction has been shown to increase social integration among four-year colleges (Pascarella and Terenzini 1991). Maxwell (1998), however, found that four-year social integration theories do not produce the same positive results when applied to urban community colleges. Tinto (1975) defines social integration as interactions between the student and other campus individuals or groups. These

interactions may include extracurricular activities, social activities, friendships, academic assistance, and support groups. By providing supplemental instruction, colleges and universities can help to improve social integration and—by extension—the campus communication system. The overall effect for a college or university can be quite positive considering the strong correlations between social integration variables and academic outcomes such as college experience satisfaction, retention, and career success (Pascarella and Terenzini 1991). Tinto (1993) suggests that an effective campus communication system—i.e., a strong sense of social integration—is perhaps the most influential of campus variables. It is worth noting that social integration may be more critical in the case of an urban, commuter-campus where many students (as our results indicate) are older, working adults with families.

Second, colleges and universities would be wise to implement a first-year seminar course for students new to the university (first-time enrollee, returning student after a significant absence, or transfer student). Howard and Jones (2000) found that a freshman seminar at a large urban university resulted in significant gains in the areas of being prepared for the university experience, general confidence as a student, knowledge of the campus and its resources, and overall skills competence. Many studies have shown that those students who participate in first-year student seminars experience significantly lower dropout rates than those who do not participate (Cone 1991).

Third, colleges and universities should pay careful attention to the racial diversity of faculty. Liu and Liu (1999) show that—especially at large urban, commuter universities—student retention relies significantly on the faculty's racial diversity. As the demographic landscape of college students changes, a college or university's faculty should reflect those changes.

Clearly as the student landscape changes, universities will need to find models that improve the communication system and involve students in campus activities. Special attention needs to be paid to those who would not otherwise be involved—i.e., the "non-traditional" students.

More research is needed across diverse urban campuses nationwide, with particular emphasis on the differences between urban and "college-town" campuses. Researchers may want to examine the communication patterns for those activities that combine both academic and professional goals. For example, are the communication patterns that link professional and academic goals stronger for those who have independent (outside of campus) social lives? If so, should we expect this to be more likely at large, urban campuses versus the college-town campuses? These and other research questions examining the communication patterns on college campuses and how they build community need to be addressed.

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