

KNOWING YOUR STUDENTS BETTER: A KEY TO INVOLVING FIRST-YEAR STUDENTS

Joseph Fenty

To know how to teach them, we must understand our freshmen better. We must have a clear-eyed view of who they are, where they come from, how they have been instructed, what values they hold, and what their expectations and goals are [Erickson & Strommer, 1991, p. 4].

This Occasional Paper focuses on first-year students and what faculty can do to increase the likelihood that students will attain their educational and personal goals. First-year students are, in many ways, the most vulnerable group in our academic community. The American College Testing Program reports that 26.9% of all first-year students left college before becoming sophomores in 1996 (Geraghty, 1996). This percentage represents a record high. At public universities, the proportion of first-year students leaving college is 29%, while the number at private colleges is 25.9%. Attrition levels at most universities are often the highest during the first year of college (Noel et al., 1985). At the University of Michigan, 93% of our first-year students return for the sophomore year. This rate of persistence is outstanding; nevertheless, it is important that we understand the first-year experience to maintain our success as well as improve our ability to maximize learning. Those who teach first-year students have a critical role in ensuring that our students reach their academic potential.

Research that incorporates information about first-year students' demographics, attitudes, behaviors, and expectations can help instructors understand the effects that student characteristics may have on student learning. This information may then be used to help instructors structure academic experiences to optimize student academic performance. Furthermore, research conducted on effective teaching contains important information about instructor techniques and behaviors which can promote learning. This Occasional Paper provides information on those topics and suggests learning activities faculty may incorporate into their instruction to involve students more actively in their educational experience.

Michigan's First-Year Students

First-year students' success in college is influenced by students' pre-college characteristics, institutional characteristics, and postsecondary

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experiences. With this in mind, we are presenting the results of the first-year student survey developed by the Cooperative Institutional Research Program (CIRP), the national longitudinal study of the American higher education system. Established in 1966 at the American Council on Education (ACE), the CIRP is now the nation's largest and longest empirical study of higher education, involving data on some 1,400 institutions, over 8 million students, and more than 100,000 faculty.

The core of the CIRP is the annual survey of entering college freshmen called the New Student Survey, administered by the Higher Education Research Institute (HERI) at the University of California, Los Angeles, under ACE's sponsorship. Each year some 600 institutions (including two-year colleges, four-year colleges, and universities) give this survey to each new first-year student during orientation or registration. The survey covers a wide range of student characteristics: parental income and education, ethnicity, and other demographic items; financial aid; secondary school achievement and activities; educational and career plans; and values, attitudes, beliefs and self-concept. The results from the survey provide a comprehensive portrait of both the changing character of entering first-year students and American society at large.

UM has participated in the New Student Survey since 1993. First-year student survey results for the years 1993 through 1995 are presented in this paper. CIRP data provide useful information about UM first-year students as a group. While these data are no substitute for getting to know your students personally, they can serve as a model for the types of student background information you may wish to collect to improve teaching and learning in your classroom.

Basic Demographic Characteristics

The 1995 New Student Survey indicates that eight in ten first-year students are 18 years old or less, and almost all graduated from high school in 1995. Approximately three-quarters of the students are White; 9.1% are African-American; 13.4% are Asian American/Asian; 1.8% are Mexican American/Chicano; 1.5% are American Indian, and 2.7% indicated Other. More than 95% of UM's first-year students are U.S. citizens. The population of first-year students is equally divided among men and women.

Approximately 6 in 10 students indicated a Christian religion as their religious preference. Nearly one in ten indicated they are born-again Christians. One-quarter of the students reported that they are Roman Catholic. Fifteen

percent of the first-year students indicated they are Jewish and 1.2% Islamic. From 1993 to 1995 nearly one in five students reported they have no religious preference. With the exception of no religious preference, students' religious preferences are consistent with those of their parents.

Moving Away From Home

Many of UM's first-year students are leaving home to live elsewhere for the first time. Only 1.7% reported that they will be living with their parents or relatives while attending UM. The overwhelming majority of first-year students (95.8%) indicated they will be living in the college residence halls. Nearly 7 in 10 students will be greater than 51 miles away from home.

College Choice

Although 50.4% of first-year students indicated they applied to three or more schools, three-quarters reported that UM was their first choice. Many of the students received acceptance letters from other schools, but decided to attend UM instead.

More than 9 in 10 of UM's first-year students plan to obtain a graduate degree. Only 8.8% indicated that the highest degree they plan to obtain is a bachelor's (B.A., B.S.). First-year students indicated interest in the following graduate degrees: 38.1% for master's (M.A., M.S.); 22.5% for Ph.D. or Ed.D.; 21.2% for medical degrees (M.D., D.O., D.D.S., D.V.M.); and 8.2% for law degrees (LL.B. or J.D.).

Probable Career

Students were asked to indicate their probable career occupation. The most popular career was physician, with slightly more women (20.5%) choosing this field than men (17.1%). Engineering came in second at 18.4%. More than twice as many men (25.6%) chose this field compared to women (11.3%). When compared to other selective public universities, more than twice as many of our students indicated an interest in engineering. A significant portion of our students said they were undecided about careers, 17.5% of the women and 12.7% of the men.

Undergraduate Majors

Consistent with national trends which indicate a shift from arts and science majors to occupation related programs (Paulsen, 1990), the three most popular majors cited by first-year students in rank order were engineering, pre-professional

majors (e.g., pre-med, architecture, health technology), and business. In all areas of engineering (i.e., aeronautical/astronautical, electrical, industrial, mechanical, and other engineering), with the exception of chemical and civil engineering, men were two to five times more likely than women to express an interest in this major. The most popular professional majors were pre-medicine, pre-dentistry, pre-veterinary medicine, architecture or urban planning, and nursing. Nursing was more popular for women than men. For business, the most prevalent majors were business administration, international business, and marketing.

Financing College

Approximately 1 in 10 of all surveyed students indicated they have major concerns about their ability to pay for college. While this represents a slight increase since 1994, fewer UM first-year students indicated they have major concerns in comparison to students at other highly selective public universities (14.5%). Half of our students reported some concern, but felt they probably had enough funds.

The National Center for Education Statistics (1996) reports that between 1980 and 1994, tuition, room and board at public institutions increased from 10% to 14% of median family income. This increase was larger for low-income families than for high income families. Over the same period, tuition, room and board at private institutions rose from 22% to 39% of family median income.

When UM students were asked about sources of funding for educational expenses, 81.7% indicated they expected to receive \$1,500 or more from their parents or relatives. Compared to 1993 and 1994, more students in 1995 are using grants (34%) and loans (21.7%) which equal or exceed \$1,500. In 1995 students at other public selective universities received less grant money (25.1%) and more loans (23.5%) which equal or exceed \$1,500 by comparison with first-year students at UM.

Parents' Background

The 1995 first-year student survey collected information about the parents of UM first-year students. This information is important because it helps us understand our students in the context of their family setting. Nearly 8 in 10 of the students reported that both their parents are living with each other. Approximately 20% indicated their parents are divorced or living apart. Three-quarters of our first-year students said their fathers obtained a college degree; 45% of

these fathers have at least one graduate degree. In 1995, 68.2% of first-year students reported that their mother has a college degree; nearly 30% of these degree holders have at least one graduate degree. Compared to other selective public universities, the proportion of our students' parents who have college degrees is 10% higher.

Students were asked to indicate their parents' careers. The most frequently cited fathers' careers in rank order were: business person, other (undefined category), engineer, medical doctor, and lawyer. For mothers, the most frequently cited careers in rank order were: other (undefined category), homemaker, educator (elementary), business person, and educator (secondary).

When UM first-year students were asked about family income, 7 in 10 indicated their parents' income equals or exceeds \$60,000 per year. Nearly 1 in 5 reported a family income of greater than or equal to \$150,000 per year. This last figure is nearly double the income students reported at other selective public universities.

Why Students Go to College

The survey asked first-year students to consider a list of possible reasons for attending college and indicate the degree to which they felt the reasons were important. During the period from 1993 to 1995, the reasons cited by UM first-year students as very important for attending college were: to learn more about things that interest them; to gain a general education and appreciation of ideas; to get a better job; and to make more money.

First-year students were also asked to indicate why they chose a particular college or university. UM students indicated the importance of several possible reasons. During the period from 1993 to 1995, the most important reasons they cited were: its very good academic reputation; the enhanced prospects of getting a good job and/or getting into an excellent graduate program; and the university's good social reputation.

Life Goals

The first-year student survey asks students to indicate the importance they attach to several life goals. From 1993 to 1995, UM first-year students consistently rank as essential or very important being very well off financially; raising a family; becoming an authority in their field; helping others in difficulty; and obtaining recognition from colleagues for contributions in their special field. The life goal that was

most often cited by UM first-year students in 1994 and 1995 was being very well off financially. Female students, from 1993 to 1995, were more likely to report that helping others in difficulty was essential or very important when compared to men.

Student Activities

Although college is very different from high school, first-year students tend to repeat behaviors they acquired in high school. The first-year student survey asks students to indicate how often they engaged in several activities during the preceding year. From 1993 to 1995, the activities that were most frequently cited among UM first-year students were: studying with another student, performing volunteer work, attending a religious service, and tutoring another student. Compared to first-year students at selective public universities, all of these activities were more frequently cited among UM students.

National trends indicate that students are becoming increasingly disengaged from the academic experience. The Higher Education Research Institute (1995) reports that, during their senior year in high school, students are spending less time studying or doing homework (the percent reporting 6 or more hours per week dropped from 43.7% in 1987 to 35.0% in 1995), less time talking with teachers outside of class (47.0% report one or more hours per week as compared with 62.0% in 1989), less time in student clubs or groups (29.4% reporting three or more hours per week, down from 34.0% in 1989), and less time as a guest in a teacher's home (an all-time low 26.4% report occasional or frequent visits, compared with 37.3% in 1967). In addition, the 1995 survey shows the highest percentage ever of students reporting being frequently bored in class (33.9%). Ten years ago Sedlak et al., concluded that the nature of the relationship between educators and their students and the extent to which students are actively engaged in the learning process has changed for the worse (cited in Erickson & Strommer, 1991, p. 5).

UM first-year students report spending more time studying or doing homework (55.8%) as well as participating in student clubs or groups (37.6%) when compared to the national average and to students at selective public universities. Over a third of UM first-year students report being frequently bored in class and slightly less than half indicated they spent an hour or more talking with teachers outside of class.

The 1995 first-year student survey indicates that 50% or more of UM first-year students spent, on average, six or more

hours each week socializing, studying, exercising, and working (for pay) during a typical week as a high school senior. When men and women were compared, important differences in how they spent their time were revealed. The percentage of men spending six or more hours per week on exercise or sports was 58.9% compared to 48.4% for women. The percentage of men spending six or more hours per week watching television and studying was 31.6 and 51.9%, respectively, compared with 20.6 and 59.9%, respectively, among women. Men spend much more time playing video games than do women. More than three in ten men reported playing video games for one or more hours per week, compared to 3.7% among women.

Women are not only more likely to study, they are more likely than men to spend one to five hours per week on household/child care (50.7%, compared with 40.7% among men), participating in student clubs/groups (55.1%, compared with 46.1% among men), reading for pleasure (50.3%, compared with 46.8% among men), performing volunteer work (48.4%, compared with 35.5% among men), and talking with teachers outside of class (44.8%, compared with 40.2% among men). Women are more than twice as likely as men to report feeling frequently overwhelmed (29.3%, compared with 12.6% among men).

Integration and Involvement

Incoming students, most of whom are living away from home for the first time, begin negotiating new academic and social environments when they arrive on campus. Making the transition into a college community has always been an important, and sometimes difficult, task for students.

Integration into the formal and informal academic and social systems in college increases the likelihood that students will achieve their academic potential (Tinto, 1987). Research has demonstrated that student involvement is a positive factor influencing cognitive development, and failure to integrate has been associated with attenuated academic achievement, overall dissatisfaction, and high dropout rates (Astin, 1993; Pascarella and Terenzini, 1991; Tinto, 1987). Faculty-student interaction, peer relationships, and participation in co-curricular activities are all strong indicators of involvement (Astin, 1993; Pascarella and Terenzini, 1991). Students who are involved in "intellectual activities reported the most progress in learning abstractions, comprehending ideas, and applying principles" (Pascarella and Terenzini, 1991, p. 147).

A key to involving students in their educational experience is the faculty-student instructional relationship.

When the student-professor relationship is positive, students take greater intellectual risks, increase their critical thinking, and increase their intrinsic motivation to perform academically. Moreover, when the relationship is positive, professors are more highly valued by students (Walsh & Maffei, 1995).

Involving Students: Some Students' Views

The quality of the student-faculty relationship is the responsibility of both the student and faculty member. Both parties need to collaborate so the student may gain as much as possible from the educational experience.

Research suggests that students tend to favor “a vision of the student-professor relationship as easygoing, familiar, and accommodating, whereas professors contemplate a relationship marked by fair dealing, clarity of expectations, and a strong commitment to learning by both parties” (Walsh and Maffei, 1995, p. 2). While these perspectives are not mutually exclusive, it is clear that students and faculty may have different expectations. Student expectations have been summarized this way:

Although solid course content and clear, enthusiastic communication are likely what students want from teachers first and foremost, students also want to be treated fairly, to be cared about as individuals, to be dealt with in an accommodating manner, and to have faculty they can trust and respect [Walsh and Maffei, 1995, p. 2].

Additional research suggests that women and men look at the student-faculty relationship in different ways. Female students perceive professor behaviors as more important to the student-professor relationship than male students. “The chance that a professor will sour students’ experiences by not adequately attending to these matters [those listed above] appears larger for female students and for students in programs where a close working relationship is essential rather than merely desirable” (Walsh & Maffei, 1995, p. 2).

Involving Students: What Can Faculty Do?

It is widely accepted that faculty and administrators should strive to encourage the integration of students into the university’s formal and informal academic and social systems. There are a number of ways in which faculty can enhance the student-faculty relationship to more actively integrate the student in the educational experience. There also are a number of structured thematic programs available

to the faculty at the University of Michigan to nurture integration.

From highly structured programs to classroom instruction, advising, and in more personal ways, faculty can enhance involvement and improve the likelihood of learning. The following list offers some suggestions for getting started.

1. Promote student involvement in learning by incorporating active learning techniques in the instructional setting. For example, faculty can plan activities that organize students into cooperative groups to accomplish academic tasks. Cooperative learning groups actively integrate students into their learning environment. (CRLT provides numerous programs and individual consultations to help instructors with teaching techniques for active learning.)
2. Promote student involvement through your role as advisor and mentor to the students. Help students navigate the demands of academic life by providing challenge, support, and tacit knowledge—knowledge about academic norms which have not been formally codified.
3. Be expressive and enthusiastic. Convey to students your own intellectual excitement for the discipline. When appropriate, talk about your involvement in the subject, the work you have pursued and how it bears on the topic under consideration. Try to make it clear that one of your goals is to pique student interest and excitement in the course.
4. Interact with students in and out of the instructional setting. Students are sometimes hesitant about going to office hours for fear that they might be disturbing faculty. By emphasizing your availability and encouraging them to visit your office, you can help break down this barrier. In addition, spend some time talking to students about the course before and after class. Ask them how the class is going, what they find exciting or difficult.
5. Be approachable: Invite student views and discussion. Leave time for questions at various points in the class. You will generate more discussion if you give students a chance to take time to think and write down their ideas, even share them with a neighbor, before starting a general discussion.
6. Express concern about student progress throughout the semester. Try to provide regular feedback to students so that they know where they stand. For example, give short assignments throughout the semester rather than one major assignment at the end of the course. Whenever possible, use these assignments to help students identify strengths and weaknesses. This can be done on individual papers, or you

can discuss common problems and misunderstandings with the full class.

7. Be open to helping students with problems. Be flexible when students have legitimate difficulties that interfere with their academic work. Familiarize yourself with the support offices on campus, such as the Office for Students with Disabilities and the Counseling Center, so that you can let students know what resources are available to them.

8. Learn students' names and use them. Spend time on the first days of class doing activities to help you with this. Some faculty ask students to take the same seats each time at the beginning of the semester. Others ask students to bring in small pictures of themselves so that they can start associating names and faces.

In addition, UM has several programs which are designed to enhance the quality and quantity of contact between faculty and students. Examples of such programs are described below. If possible, consider participating in one of these programs:

1. Undergraduate Research Opportunity Program (UROP): This program provides students with the opportunity to work with faculty on research projects. Students have participated in projects such as searching for cures to cancer and AIDS, mapping human genes, and studying national trends in voting and the changing American family. The University is currently expanding the number of research opportunities available to undergraduates.

2. Living-Learning Programs: These residential experiences are designed to encourage students, particularly first-year students, to interact with faculty. The Living-Learning Program helps break down the size of the institution into manageable and identifiable communities which are organized around central themes. Faculty teach courses in the classrooms housed in residential facilities around campus as well as coordinate out-of-class activities which have learning objectives.

3. Mentorship Program: This program is designed to improve the undergraduate experience for University of Michigan students by providing them with mentors. The program matches faculty and staff with upper-class students who, in turn, serve as mentors to up to four incoming first-year students. These groups are coordinated such that each member shares similar academic and/or professional interests.

4. First-Year Seminars: In an effort to alter the perception that the University is impersonal, First-Year Seminars were

designed to create a smaller, more personal experience and to encourage greater student-faculty interaction. The College of LS&A now offers 160 first-year seminars, which give students the opportunity to take classes taught by full professors with 25 or fewer students.

5. Center for Learning Through Community Service: This Center has developed service learning opportunities to help students assist faculty members conduct community-based research. These research activities are designed to serve communities as well as students.

First-year students are important members of our academic community. Unfortunately, they are also at the highest risk of leaving the University of Michigan without achieving their educational goals. Research indicates that interaction between faculty and students has a positive effect on student motivation, intellectual commitment, personal development, academic achievement, and persistence (see Chickering and Gamson, 1991). By understanding the difficulties first-year students face and examining strategies to integrate students into the UM community, instructors can ease the transition to college and help students succeed in their first year and beyond.

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