colleges and universities invest significant sums in IT products and services to meet students’ expectations. But even though students may be the reason for these investments, they aren’t often part of the process: those making the decisions assume they understand what students want and need. This is in spite of the general belief that there is a large gap between the technological sophistication of students and that of faculty/administrators.

The current generation of traditional-age college students has grown up with computers and the Internet. The rapid-response, multimedia, anytime-anywhere networked world that these students inhabit has shaped their worldview, their reaction times, and how they learn. On the other hand, those in an earlier generation who remember 78 rpm records, telephone party lines, and Monroe calculators were shaped by a different set of technologies. Although several generations inhabit the Information Age, the generations will likely think and act differently and expect different things from technology.

Students in the current generation, the Net Generation, are characterized as multitaskers who favor graphics over text, who communicate with equal ease in person and online, who expect instantaneous responses, and who prefer Google to the library. But though they may never need to consult an instruction manual for an electronic gadget, their comfort with technology may not be synonymous with competency. Students’ underlying understanding of the technology may be shallow. The same is often true of their scrutiny of information sources and their respect for intellectual property. The Net Generation may be simultaneously ahead of and behind earlier generations.

In addition, educators must remember that three-fourths of college and university students today are nontraditional (i.e., have delayed enrollment into college, attend part-time, work full-time, are financially independent, have dependents, are single parents, or lack a high school diploma). Thirty-five percent of undergraduates are adult learners, with an average age of thirty-eight. To assume that all students are technologically savvy members of the Net Generation would be incorrect.

Still, the prevalence of computers among college and university students is striking. In one study, 84 percent of students claimed to own a computer, with one-fourth claiming to own multiple computers. The figures vary considerably by type of institution. Liberal arts colleges have the highest rates of personal ownership of computers (78%) and community colleges the lowest (30%). In addition, access to computers and broadband in Hispanic and African American homes continues to lag behind access in white homes. Another good predictor of access is family income. Thus, few student populations are homogeneous with respect to computer access or skill.

However, there is ample evidence that faculty and administrators do not understand students’ IT preferences. Few faculty and administrators share the Net Generation’s proclivity to communicate by instant message (particularly with those in the same room), to send photos from cell phones, or to engage in massively multiplayer online games. Teenagers prefer communicating online to using the telephone. For them, online is not synonymous with impersonal, nor does online exclude face-to-face communication.

Learning style preferences of the Net Generation tend toward hands-on, experiential activities rather than lectures. Whereas faculty might prefer text over graphics, students’ preferences are often the reverse. Students feel at home integrating the physical and the virtual; many in the older generations live in only one environment at a time. Even the definition of technology differs for faculty and students. If technology is defined as “something that was created after you were born,” then computers, networks, and the Web are not technology to traditional-age students. For them, technology has receded into the background.

When students are asked what is important in an optimal learning environment, faculty expertise is at the top of their list. Even though theirs is a technology generation, the human side has not taken second place. Students expect to have contact with faculty, and they expect faculty to be experts in the field. In fact, traditional-age students are much less favorable toward taking online courses, perhaps because they expect to be part of the campus community. By contrast, more mature learners, who have quite different expectations, express greater satisfaction with online courses. Surveys indicate that in general, students today are engaged by academic challenge, active and collaborative learning, and interaction with faculty. Student persistence is associated with student-faculty interaction, student-student interaction, partici-
interaction in extracurricular activities, interaction with peers outside of class, and living and working on campus.  

Whether due to a change in learners or to a better understanding of how to foster strong academic environments, new types of learning and living arrangements are appearing on campuses to facilitate the integration of formal and informal learning. Institutions are establishing information commons, multimedia production areas, small-group workspaces, and hallway “think stops.” On other parts of the campus, such as the library, student spaces are being rethought as places for interaction, community, learning, and experiencing rather than as buildings for collections and catalogs.  

Many assumptions about students are not matched by reality. Rather than assuming, colleges and university executives should consider asking themselves the following strategic questions:

1. Do we know our students and their preferences, or do we assume we know? Many institutional decisions are predicated on the belief that the decision-makers understand their students, as well as their students’ needs and preferences. What does the data say? Although an institution may be able to profile student demographics, what is known about student technology ownership and use? Have focus sessions been held to discern students’ preferences? Are students being exposed to effective uses of technology, or has “death by lecture” been replaced with “death by PowerPoint”? Perhaps as important, are decision-makers assuming that all students are alike?

2. How are we adapting programs to students’ needs? Although institutions strive to be student-centered, do they really know what students’ needs are? Is the institution assuming that because students aren’t afraid of technology, they will want more technology in the classroom? When technology is used, does it add value? The risk is that technology is used in ways that emulate rather than enhance the lecture.

3. What balance of physical and virtual will best serve our student population? Although most students utilize technology extensively in their personal lives, what balance of face-to-face and online is best for their academic program? For the delivery of student services? Are there some students who need a traditional face-to-face environment (e.g., older students or at-risk students) and others who thrive on the virtual?

4. Are our building and renovation plans based on outdated assumptions? Is the classroom the default configuration for learning spaces? If students are experiential learners and prefer to work in teams, do spaces designed with a face-forward, chairs-bolted-down approach help or inhibit learning? Has the tradition of separating computers from classrooms outlived its usefulness? For a generation of multitaskers, providing a wealth of online resources during class may be more helpful than blocking out any extraneous influences. Is the institution focused on classrooms while ignoring the informal spaces where most of the learning by students actually takes place?

5. What is the proper balance between student and faculty perspectives? Although listening to learners is important, faculty and administrators are experts in their disciplines, as well as in how the discipline should be taught. On what subjects should the input of students be sought? In which areas should faculty have the dominant voice?

It is dangerous for college and university faculty and administrators to assume that they understand their students simply because they were once in the same shoes. Times change. Technologies change. And so do students.

Notes


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