Computer technology permeates most aspects of our lives. The ability to use computer....
technology and to evaluate electronic information has become a basic skill for community college students in both academic and occupational programs. This Digest expands the definition of computer literacy to include information literacy, delineates issues surrounding student access to new technologies, describes courses that include instruction in computer-related skills, summarizes efforts at including computer literacy among general education requirements, and addresses the faculty role in computer-skills.

DEFINITION

Definitions of computer literacy vary depending on the type of degree program or course in which they are being used. At Florida's Miami-Dade Community College (MDCC), administrators conducted informal interviews with faculty to develop educational objectives for a technology basic skills workshop for students. Respondents indicated that all students should be able to use a word processor and its options such as spelling and grammar check, computer tutorials, and CD-ROMS for research (Lever-Duffy, 1993). With the increase in access to the Internet, definitions of computer literacy have expanded to include the ability to use e-mail, graphical interfaces such as Netscape, online publishing, and the ability to evaluate the content of online materials (Corl, 1996). The importance of locating and evaluating electronic information sources expands the definition of computer literacy to include information literacy as well. "Information literacy is the ability to identify what information is needed and the ability to locate, evaluate and use information in solving problems and composing discourse" (Nolte, et al, 1993, p. 14).

ACCESS TO TECHNOLOGY & OPPORTUNITY

Access to technology improves access to educational opportunities. The members of Maryland Community College Technology Council (Clagett, 1998) believe that technology can benefit students by improving access for a wider audience by "removing time and location barriers, diminishing dependence on the physical campus, providing just-in-time learning and student services" (p. 4).

Lever-Duffy (1993) identifies students' lack of basic computer skills as a barrier to the successful integration of computer-assisted instruction. Corl (1996) found that 91% of the pre-service teaching programs at senior institutions require courses in technology. She believes those community college students who hope to transfer to these programs must become proficient in computer skills before transferring. Furthermore, Sherry and Sherry (1996) found that students' perceptions of their computer skills, especially in the use of spreadsheets, was positively related to their persistence in college.

Menchaca (1997) indicates that creating access to technology means more than just providing hardware, software, and Internet connections. Providing equitable access includes considering cultural and skill differences in designing interfaces and providing comfortable environments in which people can realize their own potential.
Although institutions must do their part by providing adequate equipment and training opportunities, students must do their part by participating in computer-skills training. Student resistance to using computer technology may be caused by a lack of patience or experience (Corl, 1996). Students who lack experience with the time required for uploading websites become frustrated or assume that the devices are not working. Corl recognizes that students often abandon their projects instead of trying other solutions if the lab staff or teacher is unavailable.

INCORPORATING TECHNOLOGY IN COURSES

Assignments that enhance students’ computer skills can be incorporated into regular curricular offerings. Corl’s (1996) “Introduction to Education” course incorporated group and individual assignments in the use of e-mail and Netscape as part of the students’ participation grade. Nearly two-thirds of the students reported that their Internet experience was good while 90% said they would use it again for themselves and in their classrooms.

At Florence-Darlington Technical College in South Carolina, a freshmen composition course incorporates technical skills in humanities instruction in order to ensure that students acquire written communication skills (Whitaker, 1995). Students engage in at least 45 hours of experience writing on a computer, receiving instruction that focuses on their individual strengths and weaknesses. Computer-assisted instruction allows students to submit their work at their own pace and allows the student and teacher to work on multiple drafts.

GENERAL EDUCATION REQUIREMENTS

Success in adopting computer literacy as an aspect of community college general education requirements has been increasing. In 1987, a task force at Prince George’s Community College (PGCC) in Maryland rejected a proposal to include computer literacy as a new requirement for an associate degree. In 1997, the task force reconsidered their decision and adopted computer literacy as part of an expanded general education program that enables students to transfer up to 36 credits to senior institutions (Barshay & Cant, 1997).

At Tacoma Community College (TCC) in Washington, a needs assessment survey indicated that basic academic skills, communication skills, and adaptive skills are more important than specific technical skills to local employers. In light of these findings, a task force recommends the inclusion of six essential skills, including computer literacy, among the objectives of general education requirements for occupational students (Nolte, et al, 1993). To demonstrate their computer literacy, students undergo individual assessment processes rather than take required courses.

FACULTY ROLE
Computer literacy holds benefits for faculty as well as students. Mastery of new technologies benefits faculty through improving instruction and by increasing productivity, expanding access to more instructional technologies, and facilitating participation in distance learning (Clagett, 1998, p. 4). Use of technology in the classroom elevates the teaching role of faculty by reinforcing the role of "designer of learning rather than dispenser of information," facilitates the integration of new knowledge, and enables the faculty to be learners as well as teachers (Clagett, 1998, p.4).

Library faculty are the natural choice for instructors in computer and information literacy. Librarians are professionally trained as instructors in research methods, critical thinking skills, and information literacy skills; however, librarians' workloads have increased as support for staffing and materials has decreased, and new technologies have demanded continual skill updating. Complete dependence on librarians to teach new courses in computer/information literacy is not feasible since they are often overextended in their duties (Academic Senate for California Community Colleges, 1996). Regular faculty members must also be prepared through collaborative learning, professional development workshops, and personal initiative to contribute to the teaching of courses that integrate computer and information literacy.

CONCLUSION

Skill in accessing, manipulating, and evaluating electronic information sources and devices is necessary for student success in higher education and the working world. Community colleges can employ a number of methods to develop computer and information literacy in their students. Integrating technology with existing courses and expanding general education requirements ensure that students will become familiar with technology. Barriers such as student resistance and faculty availability will continue to be issues throughout the transition of community colleges into the Information Age.

REFERENCES


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