

Technology in Higher Education: Friend or Foe

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Technology has offered many new conveniences for today's college students, such as a means to decide on which professor to take by reviewing other students' comments on the internet site Pick-A-Prof. Students can also meet new friends that live across the country on "Face book." Technology also has a down side: it reduces the need for face-to-face contact, which leads to depersonalization. Campuses all over the country are plagued with a ubiquitous sea of students walking through campus talking on cell phones with their heads down, avoiding personal interactions. Many proponents of the Internet would argue that visiting chat rooms increase the socialization of the user; however, using the Internet to socialize is also associated with negative outcomes. A high use of email to communicate is associated with depression (Kraut et al., 1998).

Psychological problems among college-age students have been increasing for the past 15 years (Young, 2003). The psychological problems have also heightened in severity, which resulted in students being prescribed psychotropic medications to enable them to attend class and function normally. Researchers from Kansas State University found from 1989 to 2001, that the number of students with depression doubled. The percentage of students taking psychiatric medication also increased from 10% to 25%. Harvard has also noticed an increase in students taking advantage of their counseling services. Harvard has increased their counseling staff by five full-time positions in the past four years, bringing the total to 23 (Young, 2003). Young also noted that the increase in college students' psychological problems might be a result of normalizing depression and psychotropic medications like Prozac or other antidepressants. There are many explanations for increases in psychological problems in college-age students. One of the more plausible explanations is that psychological problems are related to recent availability of technology and technological advances, which has negatively affected students' emotional and psychological states of mind.

The National College Health Assessment reported that depression diagnosis has steadily been on the rise, increasing 4.6 percentage points across the past four years (Hoover, 2004). The 2004 study, which included 47,000 students at 74 colleges, found that 14.9% of students reported being diagnosed with depression and 10% had considered suicide within the past year, compared to only 10.3% of students who reported having a depression diagnosis in 2000. The study also reported that in 2004, 38% of the students who had been diagnosed with depression were taking medication to control the symptoms, and 25.2% of the students reported that they were in therapy. Of the students who reported being diagnosed with depression, 50% of the females and 40% of the males stated that depression symptoms made it hard for them to function at school one or more times during the last academic year (Hoover, 2004). Thus, not only are psychological problems increasing in college students, the symptoms are becoming so intense that it interferes with students' studies.

Kraut et al. (1998) conducted a longitudinal study on 169 participants in 73 households

over a 12 to 24 month period in March 1995 or 1996, during the initial years of Internet use. Internet and email usage were recorded with the use of software that was loaded onto the computers. Participants completed a pre-test and a post-test that indicated their psychological well-being and social involvement. The results indicated that Internet use was statistically significant in a marked decline of social connectedness. Individuals who used the Internet had a smaller social group and diminished communication with their families.

The researchers also found that individuals who habitually used the Internet, experienced increased feelings of loneliness and depression (Kraut et al., 1998). Participants who reported feeling lonely initially, became even lonelier after using the Internet for the duration of the study. The participants self-reported more symptoms of depression in the post-test, even when initial feelings of depression were held constant. The study also examined the participants' social circle and found individuals who scored high on social extraversion and had a large social circle used the computer less frequently. A small correlation was found between increased stressors and an increase in using the Internet among teenagers. Thus, if Internet usage has this negative effect on families, the implications for a college student, who is already physically isolated from their family network, could be disastrous.

The decline of psychological health in college students is disheartening to Student Affairs professionals. The goal of a Student Affairs practitioner is to ameliorate the whole student in every area and encourage the student to be actively engaged in activities that will do just that. College enrollment is expected to increase 20% by the year 2014 (Aronauer, 2005). The enrollment hike may compound the problem, as professors rely on technology to reach all of the students in some over crowded classrooms.

In 2003, the Current Population Survey reported that of the individuals between ages 20 to 24, 68% of White individuals, 44% of Black individuals, and 37% of Hispanic individuals reported using a computer in their homes (National Center, 2005). Individuals between the ages of 15 to 19 reported using an in home computer at even higher rates: 84% of White individuals, 51% of Black individuals, and 52% of Hispanic individuals. The results of the survey provide further evidence of technology availability and wide spread use.

The 1998 National Survey of Information Technology in Higher Education reported that only around eight percent of postsecondary schools used email in 1994. That number dramatically increased to 44% in 1998 (Flowers, Pascarella, & Pierson, 2000). The survey also reported that in 1998, almost 50% of all postsecondary institutions had implemented mandatory information technology fees. Thus, not only are college students taking advantage of the conveniences of technology, the American population as a whole are utilizing computers at an increased rate.

Over the past 35 years in the United States, Putnam (1995) found a sharp civic engagement decline; at the same time technology advances were soaring. He also found a decline in church attendance, organized dinner parties, and socializing with neighbors. Putnam suggested that social disengagement is related to a demoted psychological and physical health and a diminished quality of life. While this information is only a correlation, it introduces the idea that technology may have a negative effect on many aspects of an individual's life.

Kraut et al. (1998) concluded that while the Internet is useful and entertaining, it also promotes disengagement from real life. The value of the Internet should be proportionately balanced with the emotional and societal costs. Kraut et al. also suggested that individuals should monitor for what activities they use the Internet to ensure they are not replacing all face to face contact with technology.

The increase in technological advances could be a devastating epidemic if professionals, especially in higher education, do not realize the impact the convenience of technology can have on the psychological health of individuals. Technology has similar attributes to an appealing drug in the eyes of a college student. Both offer excitement, both could create a no-holds-bared atmosphere, they are both relatively inexpensive to a college student, and they can both be used as a way to fit in with other students while maintaining anonymity. Technology is here to stay, so it is up to professors, administrators, and practitioners of higher education to monitor students' engagement in technology, to ensure that not all face to face interaction is lost in and outside of the classroom.

References

- Aronauer, R. (2005). College enrollments are expected to continue rising through 2014, report says. *The Chronicle of Higher Education*, Retrieved September 22, 2005, from <http://chronicle.com/daily/2005/09/2005091206n.htm>
- Flowers, L., Pascarella, T. E., & Pierson, T. C. (2000). Information technology use and cognitive outcomes in the first year of college. [Electronic version]. *Journal of Higher Education*, 71(6), 637-648.
- Hoover, E. (2004). More college students report diagnoses of depression. [Electronic version]. *The Chronicle of Higher Education*, 51(16), A28.
- Kraut, R., Patterson, M., Vicki Lundmark, Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox. *American Psychologist*, 53, 1017-1031. Retrieved September 17, 2005, from PsycARTICLES database.
- National Center for Education Statistics. (2005). Youth indicators (Report No. NCES 2005-050). Institute of Education Sciences, U.S. Department of Education.
- Putnam, R. (1995, January). Bowling alone: America's declining social capital. *Journal of Democracy*, 6, 65-78. Retrieved September 19, 2005, from Database Project Muse.
- Young, R. J. (2003). Prozac campus. [Electronic version]. *The Chronicle of Higher Education*, 49(23), A37.