

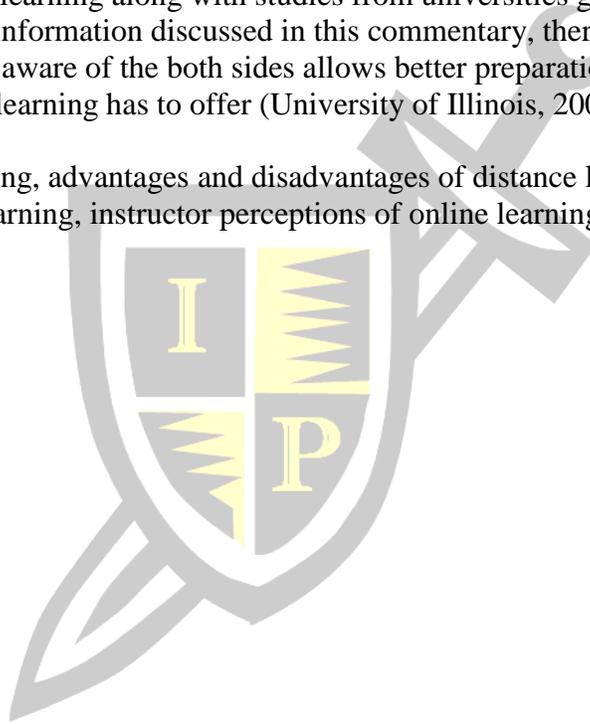
## Teaching beyond the classroom walls: The pros and cons of cyber learning

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### ABSTRACT

This article discussed some of the advantages and disadvantages of online learning. Although much has been written about the growing presence of online learning, this author's position is consideration must be given to the rewards and drawbacks of cyber learning. Reviews of both sides of the issues via in-depth literature reviews, personal conversations with individuals experienced in distance learning along with studies from universities guided the discussion of the article. Based upon the information discussed in this commentary, there are many valid concerns to be considered. Being aware of the both sides allows better preparation to embrace the new experiences that online learning has to offer (University of Illinois, 2007).

Keywords: online learning, advantages and disadvantages of distance learning, student perceptions of online learning, instructor perceptions of online learning



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“The next big killer application for the Internet is going to be education. Education over the Internet is going to be so big it is going to make e-mail usage look like a rounding error.”

- John Chambers, CEO Cisco, 1999 (Shank and Sitze, 2004, p. 4)

Online education is growing exponentially in popularity among programs of education throughout the country. This phenomenon called online learning has been revered as an extraordinary change to the delivery platform of education. However, there are some that seem to believe this is not the panacea it is venerated to be, as it has sacrificed academic growth and the imagination of students (Monk, 2010). Much has been written about the popularity of online learning, but consideration should also be given to disadvantages as well as the advantages pertaining to this new wave of technological learning that is sweeping the nation.

## **TRADITIONAL CLASSROOMS TO ONLINE CLASSROOMS**

Distance education, what defines this form of education? According to Lewis, Whitaker, and Julian, 1995, it is “the delivery of the educational process to receivers who are not in proximity to the person or persons managing or conducting the process” (as quoted in Bitter and Legacy 2006, p. 130). Distance education has “brought new life and possibilities...No longer is learning away from a traditional classroom the exception, but rather it is becoming a learner-centered standard many educational models strive to replicate” (Bitter & Legacy, 2006, p.131). With the introduction of the Internet within the past thirty years, new dimensions of learning have surfaced as alternative forms of education that has brought traditional learning platforms offered in higher education out of the four walls of the classroom into the realm of cyberspace.

Other formats of cyber learning contain a mixture of what is referred to as hybrid courses. These courses are offered in a percentage of time spent in face-to-face contact with the instructor and another percentage of class time spent in the cyber space classroom. Combining these two attributes gives the student the best of both worlds in which to grow academically.

## **THE ADVANTAGES OF ONLINE LEARNING**

Morrison, Ross, and Kemp (2007) postulated that distance education has “additional strengths beyond the traditional classroom lecture and self-paced instruction for both training and education environments...Students can ‘attend a class’ without going to campus. Very large audiences situated miles apart can potentially be served” (Morrison et al., 2007, p. 21).

Dr. Berge, Director of Training Systems at UMBC (2007), believes the power of online learning is in “the use of computer-mediated communication in distance learning to create online classrooms has become a popular means of distance learning, both in mixed mode with face-to-face instruction or as a sole channel of education at a distance” (p. 1). “Whether or not you’re keen on using technology for learning, the fact is that it’s here to stay. Technology has become an essential way to handle the education, training, and retraining needs of an expanding knowledge society” (Shank & Sitze, 2004, p. 2).

### **Convenience**

The attribute of convenience is cited as the foremost advantage to online learning. Students are finding themselves in situations in which they would rather choose the convenience

of online learning over the face time required of the brick and mortar classrooms. The convenience of online learning allows for fast access to instructors and peers in the cyber class. When graduate student Leia Key was asked what she liked most about online classes, she replied, "I like having the entire Internet at my fingers to do all of my research, although there are some situations that call for a book, but they are few and far between... [and] the freedom of creating my own schedule – posting when and how I can. I also don't have to worry if I have enough gasoline to make it to class." Leia is a graduate student at Phoenix University and she who also holds a Bachelors degree from that same university, thereby giving her five years of experience in the online learning environment (personal conversation, February 1, 2010).

## **Participation**

Ease of participation is an appealing attribute of the cyber classroom. One of the many versatile elements of cyber learning is the ability for students to participate either asynchronous, synchronous or in a blended learning format. Teaching online "offered via the Internet can take many forms, ranging from Web pages to mailing lists to course management systems such as Blackboard. Students can interact in real time in chat rooms or asynchronously by posting to bulletin board or forums" (Morrison, et al., 2007, 218). Provided with all of these communication formats, students are afforded an easier route of communication with the instructor or other students in the class.

The playing field for communication purposes is leveled, because everyone in class can contribute. According to professors at Central Florida, "Introverts, who are quiet in the face-to-face class, really participate [online]," (Garnham and Kaleta, 2002, p.3). Kupczynski, Stallone Brown and Davis' study (2008), found student participation increased in the asynchronous environment, as there is time to "post messages, read and respond to messages, reflect on responses, revise interpretations, and modify original assumptions and perceptions..." but in a face-to-face class this would not be the case (p. 6).

## **Hybrid Courses**

The hybrid or blended course is another advantage of distance education. "As the name implies, there are a blend of various forms of learning activities. These may include classroom, learning experiences, and e-learning or various forms of e-learning or some combination of all three" (Steen, 2008, p. 528). This type of offering meets the needs of those students who prefer a face-to-face format as well as those students who prefer an online format. Garnham and Kaleta (2002) explain "The goal of hybrid courses is to join the best features of in-class teaching with the best features of online learning to promote active independent learning and reduce class seat time" (p. 1). Students' positive perceptions of blended learning are the "reduced logistic demands, convenience, increased learning flexibility, and technology enhanced learning" thereby promoting a more enjoyable and successful academic experience (Dziuban, Hartman, Moskal, 2005, slide 19).

Faculty teaching the hybrid courses noted more flexibility, interaction and communication with their students. Garnham and Kaleta (2002) found that "The amount of student to faculty contact is going to increase in the hybrid format. Students are more engaged in learning activities therefore will seek out more assistance" (p. 2). For example, a professor of archaeology can create lectures on artifact classification for online activities and class time could

be devoted to the actual handling and experiencing of the artifacts, thereby making seat time a more enriching experience ( p.2). The academic attainment for students in hybrid courses was significantly improved. Instructors believed their students performed better on exams, produced better papers and came prepared to have more meaningful discussions while in the classroom (p.2).

Student retention was also an advantage in conjunction with online classes. According to data attained from a study on Web-enhanced courses at the University of Central Florida (2005), "Web-enhanced courses have higher success rates (percentage of students obtaining an A, B, or C) and lower withdrawal rates than their comparable face-to-face courses" (University of Florida, 2005. p. 3).

### **Cost Effectiveness for the University**

Universities also realize advantages to hosting online classes, as student population tend to increase. In combination with lower withdrawal rates of online students, universities have found online learning to be very cost effective and efficient via many avenues never thought possible before online learning came into existence (Steen, p. 527). More students tend to register and take the online classes, as this reduces the opportunity costs of an education for the student and the university (Dziuban, et al., 2005, slide 19). As more courses are being offered online, enrollment increases, thereby bringing more money to the bottom line for the university.

As more students enroll in online classes, classroom allocation is an area that can be streamlined. The demand for classrooms tends to drop, because the space is not needed as often, thereby cutting the cost of utilities and up keep. "Online programs have little or no cost for instructional facilities, transportation and related staff," Cavanaugh said. "The value of distance education also increases when considering the broad range of available online courses" (University of Florida News, "Online Classes," 2009). In these days of budget cuts, reductions in force in both the private and public sectors coupled with declining enrollment for some universities, this is good news.

### **DISADVANTAGES OF ONLINE LEARNING**

So far, online learning appears to have many advantages for all concerned. Even though there is a positive spin being endowed on cyber learning, there are complications that need to be brought to light. If not properly understood, anticipated and prepared for, these disadvantages can prove to be formidable obstacles.

#### **Computer Literacy**

A disadvantage that is often times overlooked or assumed is that individuals participating in online courses are computer literate. Consider one of the basic facts pertaining to online learning: students and faculty have to be computer literate. It's a plain and simple fact. As hard as it is to imagine these days, there are individuals that are less than adequately prepared for a technology-rich learning environment (Ratliff, 2009). Without this ability, the cyber classroom is a moot point. According to Dutton et al., 2002; Halsen & Gratta, 2002, numerous studies have indicated that the Internet can prove to be an effective learning instrument, but the studies also point out that the students participating in an online course necessitates a particular level of

computer literacy also (as cited in Wojciechowski & Bierlein Palmer, 2005). Rafaill & Peach (2001) proposes the outcome of this illiteracy resulting in the faculty member charged with teaching the online course not only has the responsibility of teaching content of the course, but also has to remediate the students in the use of technology. In the end, this reduces the time spent on the vital material the instructor is required to cover (as cited in Ratliff, 2009).

### **Online Access**

Although computer literacy is a requirement of online learning, but so is online access. The lack of access either due to logistics or economic reasons, will exclude participants from the cyber class. This is a limitation for all online programs that are reliant on Internet access. Quality transmission is another issue of the telecommunications system and other resources required to successfully transmit. Although there may be two-way communication capabilities available, if the quality is poor, distractions and frustrations can ensue making it "difficult to follow aurally and visually, students may lose interest in the instruction" (Morrison, et. al., 2007, p. 218). Morrison also brings out the point the hardware requirements for online learning may be too expensive for some institutions and students (p. 219). In essence, the institution hosting the eLearning courses as well as the participants need to acquire reliable access before considering the online learning endeavor.

### **Course Design**

Design and implementation is another disadvantage to online learning. Designing the cyber course to effectively meet students' needs can be a sizeable responsibility for the educator, as "there is no one-size-fits all approach to the design of eLearning, because each course is unique..." (Steen, 2008, p. 531). Data from the University of Central Florida's study on the learning impact of online courses found 77% of faculty believed preparation time for online courses to be significantly higher as opposed to preparing for comparable face-to-face sections ("Distributed Learning Impact Evaluation", 2005, slide 6).

Individuals charged with the implementation of courses online not only have to be knowledgeable of the subject area they are teaching, but also "acquire new teaching skills, such as learning to facilitate online interactions and assess student online learning..." (Garnham and Kaleta, 2002, p. 4). Online teaching is very different than that of the face-to-face classroom teaching element. Dr. Steve Bain, professor of counseling education at Texas A&M University-Kingsville proposes that "Online learning is two dimensional. You can think it and write it, but you can't feel it. In other words, there is the physical and the cognitive" (personal communication, February 2, 2010). For those educators that have taught only face-to-face classes now have to be retrained to think in different dimensions as Dr. Bain has alluded to.

### **Face-To-Face Time**

Lack of instructor face time is another issue that has been seen as a downside to cyber learning especially for students of particular learning modalities. For example, students that learn via the tactile/kinesthetic modality do best when moving, doing, and touching to facilitate their learning experience. Learning online for these students is not the ideal environment for them, as

they perceive their educational experience to be "through abstract symbols, de-contextualized and cast on a two-dimensional screen making it intangible to them " (Monk, p. 326 - 327).

Attending classes online is out of the physical realm of the campus thus requiring students to work at their own pace. Students requiring a "pacing mechanism, such as a weekly lecture" may not be successful in the cyber classroom, as they may fall behind (Morrison et al., 2007, p. 219). Morrison continues on to say that students enrolled in online courses tend to drop out of college at a higher rate than those students experiencing the typical college campus routine (p. 220). "On the average, fully online courses have slightly lower success rates and higher withdrawal rates than either their face-to-face or Web-enhanced counterparts" (University of Central Florida, 2005). There is little support and guidelines provided for students in an online course, as they are expected to seek their own resources for assignment and exam completion. This can be a daunting experience for the student.

## **PARTING THOUGHTS**

With the increase of e-Learning, consideration needs to be given to some of the advantages and disadvantages of the technological learning that is available. As technological advances have taken its place in the information world, individuals have become more exacting and better informed as to what choices exist for their education. Of these new advances, Berge (1998) hypothesized:

Demographic trends, political forces, economic factors, the need for lifelong learning, and the changing emphases in teaching and learning, there is a resurgence of interest in distance education both at traditional institutions of higher education and in organizations whose sole mission is distance education as with any situation, there are two sides to consider. (p. 1)

The two sides Berge referred to are the advantages and disadvantages of such an educational delivery system. As online education grows exponentially in popularity among programs of education, the deliberation of the strengths compared to the weaknesses is vitally important so as to be better prepared to cope with the challenges of working and/or learning in this environment. Being better prepared for what may come, allows one to embrace the new opportunities that online learning has to offer (University of Illinois, 2007).

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