

Higher Education: The Online Teaching and Learning Experience

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Abstract

Globally, higher education, as well as K-12, utilizes online teaching to ensure that a wide array of learning opportunities are available for students in a highly competitive technological arena. The most significant influence in education in recent years is the increase and recognition of private for-profit adult distance and online education programs as legitimate institutions for quality learning. Online learning focuses on a wide range of technological based learning platforms, delivery methods, and the integration of educational technology components into the learning environment. The emergence of modern technology has allowed students at all levels, young and mature, the opportunity to participate in advancing their education in an environment that is diversified, rich in best practices, yet progressive enough to allow students to proceed in a self-paced manner. This article will address online education, its strengths, limitations, online teaching tools, professional development, best practices, and an evaluation of a personal online experience.

Key Words: Learning, online environment, isolation, professional development, best practices, social media, electronic, digital learning, distance learning, evaluation.

Introduction

Today's students are exposed to a technological era in which they are engulfed with an array of mobile technology and learning tools to include, ipads, computers, iphones, interactive audio or videoconferencing, webcasts, instructional videos via CD-ROMs or DVDs and computer-based systems transmitted through the Internet (The National Center for Education Statistics, 2011). Mobile devices provide education to students by allowing them to download necessary materials, immediately, to help fulfill requirements for issues they are confronted with daily (Bonk, 2009). Digital learning tools such as webcams, electronic books, and audio devices for recording lectures, to be used by students at their convenience, are effective tools offered by educational institutions to increase students' success rate with course requirements. Electronic books can reduce the cost of and ensure use of most current reading materials, and a larger variety of sources. The growth of these devices has provided instructors new and innovative tools to promote teaching and learning for students with varied educational needs. Not only are technology devices necessary for success in the online environment, but the design of the online program, including the instructor, the curriculum, and student support services accompanied by a strong sense of community and connectedness within the program, are significant as well.

The Online Learning Experience

The online learning environment is characterized by several terms. According to Kearsley and Moore (2012), *distance learning* implies a distant and reciprocal interaction between student and teacher. *Online learning* and *e-learning* are other terms used in describing distance education. Both terms represent a two-sided relationship between student and teacher which embraces the deliberate goal of helping students to learn through use of the Internet. The online learning experience, comprised of students, instructors, and the course curriculum, require the use of technological tools for accessing the online environment (Ally, 2008).

Students of the digital age appear to be independent, more technology disciplined, and technology savvy, complimenting the online environment well. The online learning environment provides autonomy, yet requires self-directed learning, and self-discipline which may influence the success or failure of online learners. Equally, delivering the best learning system and practices do not assure automatic success of online learners, or the learning experience. The online program must be embraced, not only by the learner, but the instructor as well. To meet the needs of this technologically dynamic population, instruction should be catered to facilitate student experiential learning with interactive elements, engaging varied learning styles, facilitating critical thinking, and encouraging collaborative learning experiences (Tapscott, 2009).

Learning institutions, offering online programs, are provided the unique opportunity to approach the learning process from an eclectic perspective; one that is diverse in nature, as its population of students is in their experiences. Incorporating the use of a variety of technological modalities, self-paced learning practices, and diversified learners may enrich the learning environment. The quality and design of an online program are crucial. The quality standards-based curriculum should be designed to include the following components: course procedures and guidelines, measurable learning objectives, assessment and evaluation, methodologies that address learning outcomes, interactive learning opportunities, resources and materials, learner support services, and accessibility to all students (Quality Matters Program, 2013). According to Merisotis and Phipps (2000), course quality is critical and minimal standards should be integrated into the design and development of online programs, as well as a continuous assessment to assure quality.

The learning process is strengthened and sustainable when institutions help students feel committed and satisfied with their online practices and when they experience a strong sense of community within the learning environment (Tinto, 1993). Online education may not work for every student. Some students may experience isolation and a sense of disconnectedness during the learning experience. The reduced sense of community may increase dissatisfaction and discontentment and increase the dropout rates. According to Rovai (2002), a strong feeling of community and camaraderie among students is crucial, not only to increase diligence in coursework, but also to encourage cooperation and commitment among students and student goals. Instructors can help reduce isolation in the online environment by teaching face-to face in a traditional classroom, record the collaboration among students, and incorporate the audio/video into online courses. Students that have a continual need to communicate with peers and the instructor can schedule chat sessions and online group discussions to participate and respond to questions, assignments, problems, and projects. The four interacting components of a sense of community within the online learning environment are connectedness, interdependency, socialization, and common goals (Rovai, 2002). When students can experience and embrace these components, their online experience may be more positive and lead to their success in the program. Experts suggest that instructors of online learning programs can mitigate the isolation felt by students and increase a sense of community by increasing dialogue, encouraging mutual awareness and interaction, establishing proper netiquette, providing small group collaborative experiences, ensuring that group tasks are effective for all, embracing differentiated instruction practices, and managing community size as appropriate for student success (Rovai, 2002).

Strengths of Online Learning

Online learning offers the convenience of time and space, capability of reaching a greater student population, and draws the attention of a new group of digital learners. Rovai (2002) proposed that instructors, who embrace supportive methodologies, may help students feel connected through a strong sense of community, leading to a productive and successful online experience. Online students view teacher feedback as key dimension of the teacher-student interaction process. Wong (2005) advocated that students view quantity and quality of feedback on assignments as an accurate measurement of the instructors concern and interest in them. Higher education has begun to follow completion rates, rather than just enrollment of students in online courses; this represents cost effectiveness for colleges and universities in the long run. Communication by way of the discussion tools can also help increase student achievement.

The educational delivery system is changing because of technological advances. Students now have greater autonomy at directing their learning toward their specific needs rather than approaching it circuitously (Cooley & Johnston, 2001). Experts proposed that students' self discipline, effective instruction and engagement, as well as response time in courses, contribute to the completion rate of online programs. Start-up costs for developing online courses are usually expensive which includes training, software, and computers. However, in the long run online courses could be highly cost effective for higher education institutions. Online courses require courserooms, experience potentially increased enrollment, require no commuting or parking expenses, no facilities or custodial costs, experience limited inclement weather issues, and access to library databases from any location with Internet connections. Maeroff (2003) reports that, "E-learning has come on the scene to augment and sometimes supplant the traditional classroom" (p. 2).

In lieu of bricks-and-mortar related expenses, some less-developed countries see the online experience as a cost effective option. Other foreign countries, such as Africa, Japan, and Britain, survived the misgivings of global learning programs and recognized the ubiquitous and collaborative benefits of university connectedness within the virtual learning community (Maeroff, 2003).

Research offered by (Allen & Seaman, 2006) clearly demonstrated that online learning continues to become more prevalent in the majority of higher education program offerings, provided instructors are given the necessary tools for implementation of online education programs. Data collected by the Sloan Consortium (Allen & Seaman, 2005; 2006; 2007; 2009; 2010) consistently reports an increase in online enrollment in higher education. During fall 2006, almost twenty percent of higher education students were taking at least one online course (Allen & Seaman, 2007). Nontraditional college students, 25 and older with families and full-time employment, represent a greater presence in online education than their traditional counterparts (Radford, 2011). The increased presence of nontraditional, household, lifelong learners further stipulates the need for distance and online education. Lifelong learners, along with generations of young learners, will be equipped with technology exposure and Internet access to saturate the field of online learners, thus rising above their teachers in knowledge and application (Junco & Timm, 2008). Online programs at accredited institutions have proliferated, especially because eligibility for federal financial aid programs has opened a new world of opportunities for students who once found institutes of higher education out of their reach.

Concomitant to connecting with a culturally and diversified cohort population, online learning provides an impartial, unbiased level of interaction without unwarranted judgment because of appearance, gender, ethnicity, varied socioeconomic levels, and other extraneous

factors. Students are provided the opportunity to feel more comfortable in their course interactions and have more time to prepare and engage their thoughts and ideas with greater focus and intent, therefore, improving the quality of student interaction. When comparing the online experience to that of traditional university settings, online learning can be far more beneficial than that of a lecture hall with 300 other students. The lack of face-to-face sharing allows students to feel more comfortable with being frank in discussions, especially among students who characterize themselves as being shy or timid. Conversely, personal expressions and other cues, once absent during Internet communication, including face-to-face and eye contact, are now available through FaceTime and Skype, when appropriate and necessary, for students needing this approach.

Limitations of Online Learning

As with any learning medium, the use of the Internet in distance and online learning has limitations, as well as strengths. Isolation is a crucial factor to consider when designing an online program, especially considering the social perspective which some academia shows little appreciation. Social interactions within the online environment are influenced by communication approaches designed within an online program (McInnerney & Roberts, 2004).

Research suggest that college students in online learning programs spend more time developing cognitive and critical thinking skills (Barr & Tagg, 1995) and less time in the social domain for growth and development creating a sense of isolation, not because of distance, but from the instructor and fellow learners. Isolation occurs when students are unable to interact with their peers, are not computer savvy while experiencing technical difficulties and often suffer from academic deficiencies; these factors may lead to unsuccessful online experiences (McInnerney & Roberts, 2004).

Another difficult part in building an online environment is that there is limited opportunity for establishing trust. Developing a deep level of sharing may sometimes be problematic. Ethical practices such as honesty, integrity and reliability may not always be present in student practices. The belief that there are more opportunities for cheating, creating falsehoods, and producing dishonest work perpetuates this view. Institutions have put in place policies and guidelines to help mitigate plagiarism and other dishonest practices.

Technical problems and solutions for technical support may also hinder the effectiveness of online learning. Learner support should be in place with policies and services ready to assist students, including those technologies for students who need help with assistive devices including visual and audio elements.

Online education has its critics that perpetuate a bad reputation, for this type of program, as a result of some for-profit organizations' dishonorable approaches to getting federal financial aid. Some organizations received funds for student loans even when they did not qualify. Critics view online programs, offered by for-profit organizations in higher education negatively, with the belief that the quality of education is less than that of other educational institutions (Kelderman, 2011).

Online Teaching Tools

Most schools are contemplating offering online programs. Administrators must seek vital resources to address the needs of educators. Some schools have key faculty that can shift into the online classroom (Allen & Seaman, 2005). Communication, by way of discussion tools, may help increase student performance. Instructors can quickly and easily contact students during online instruction regarding course activities or updates. When instructors are given time to collaborate, sometimes globally, with one another, share ideas and strategies for instruction, and

presentation of lessons through virtual conferences, this can promote student success in the teaching and learning environment.

Social media that includes Facebook, Twitter, Google Doc, Blogs can be used to improve teaching and learning in educational institutions through discussions, chats, group activities, and videos of lessons. Scholarship of teaching and learning works toward improvement in student learning. The integration of social media into the curriculum allows educators to increase practices of scholarly teaching. Research continues to evolve as to the specific social media that can offer the best practices to attain desired outcomes for educational institutions.

The quality of higher learning institutions should continuously be driven to improve how to effectively use the existing technology and a mind-set focusing on the future uses of technology without jeopardizing the integrity of higher learning institutions. Instruction must be available to all students, including students with disabilities. Assistive device technologies must be available for students who need help with visual and audio elements for completing the course; these services must be readily accessible with clear directions for obtaining them.

Professional Development

The readiness of faculty is another factor that must be addressed and resolved. Teachers' attitudes and dispositions must be considered as well as development of technology and online proficiency skills through continuous professional development. Guskey (2002) propositioned that the change process is gradual and difficult, yet possible. "Professional development is about ensuring that teachers continue to grow and improve" (Yager, 2005, p.18). Professional development's focus is not about attending workshops and updating portfolios to improve professionally in concept only, but in action and in application (Yager, 2005).

Considering the vast number of K-12 and higher education institutions expanding to include online programs, many instructors are still dubious regarding the effectiveness of the online environment, particularly, the diminished academic support, and the incentives used to encourage participation (Seaman, 2009). The growth of online courses and programs calls for more qualified faculty to teach online (Allen & Seaman, 2009). Some instructors in traditional learning environments experience trepidation of online dynamics such as course methodology and course management germane to the online environment. Others find it challenging to adjust new pedagogical form from a traditional structured educational environment.

Professional development presents the opportunity for educators to transition from teaching in a traditional classroom to teaching online (Palloff & Pratt, 2001). According to Ehrmann, (1995), the use of technological advances for educational delivery is not the answer to educational success, as are appropriate methodologies and learning outcomes for the students. When educators provide measurable learning objectives, appropriate instructional and learning activities with appropriate assessment and measurement, learning can occur in most environments. The design and structure of the online course should be organized, understood, and ready for implementation well in advance.

Institutions of higher learning, especially within the discipline of education, are constantly concerned with preparing teachers to cultivate best practices for addressing the progressing educational needs of their students. Digital technology allows teachers to connect with one another, learn from each other enabling them to be more effective in the teaching and learning environment.

Traxler (2007) suggested that mobile devices play a significant role in higher education for professional development, training, attending conferences, seminars and presentation of

lessons. Personal and private communication devices are compact, user-friendly, convenient and easily available to serve as progressive collaborative tools. The integration of technology and social media through online courses allow instructors to demonstrate research-based instructional and learning strategies that facilitate learning and classroom management in their classroom experiences.

Today's learning must be fostered in a technology-rich environment that encourages interaction and a connectedness to the international community. There is also a concern for students' critical thinking, skill development involving problem solving, performance and the application of acquired skills which the online environment can be designed to address. Faculty training in online learning provides educators the opportunity to understand how to effectively transition and engage teaching strategies in the online environment and address learning styles to make the appropriate instructional decisions that benefit students. These issues are all ongoing with goals that require constant monitoring, reorganization, and restructuring. The community of higher education should be continuously positioning itself to meet future challenges while managing successful current tendencies and practices.

Best practices for Online Teaching

Effective instruction in any learning environment includes the creation of a positive learning environment by cultivating self-efficacy, providing meaningful and active engagement, and inclusivity. Instructors of online learning programs must:

1. Establish a nurturing and supportive environment that reduces stress associated with academic difficulties and peer conflicts. Brain research has confirmed a link between cognitive and affective learning domains. When students feel threatened, stress hormones are released that interfere with the processing of information. Memory and learning are impaired (Jensen, 1998).

2. Ensure that communication between faculty and student must be constant and effective to include e-mail, web-based conferencing (webinar), courseroom postings, online discussions and phone contacts. FaceTime and Skype should be included for those students who need the personal approach.
3. Provide cooperative learning opportunities to facilitate critical thinking, brainstorming/problem solving, study groups and the use of dyads and peer assessment activities.
4. Provide experiential and active learning activities, utilizing Bloom's Taxonomy to activate areas of the brain responsible for higher order thinking that address the construction of knowledge through analysis, synthesis and evaluation. These activities require students to make decisions, conduct experiments, and explore ways to solve real-world problems, case studies, role-playing, and scenarios to promote a higher level of achievement.
5. Give punctual feedback regarding students' posts, within courseroom, through e-mail, courseroom assignment postings, or whatever is agreed upon by teacher and students. Structure opportunities for practice and establish peer tutoring when necessary.
6. Express high expectations of students by continually motivating, commending successes, and providing stimulating activities to support active learning.
7. Embrace cultural diversity and different learning styles by incorporating Gardner's Multiple Intelligences (1983) to address varied learning styles and engaging students' academic strengths.

8. Provide differentiated instruction, by channeling in, personally, to all students' needs, so that all learners can be reached and developed to their fullest potential.
9. Discuss and define course policies, teacher expectations and plagiarism early in course. Differentiate intentional and non-intentional plagiarism. Implement contractual documentations, if necessary.
10. Ensure accommodation of learners needing special assistance and assistive technologies.

The instructor, as well as the learner, has the option to also log in and respond to posts at convenient times. Instructors have the opportunity to contact students during online instruction regarding assignments, readings, projects, and exams in the discussion thread; chat rooms, texting, email, and conferences are also available to promote success of students.

Strategies for the Online Learner

Learners in higher education, characteristic of autonomous and self-directed learning, can control the level and pace of their learning. Online learning programs impose deadlines for courseroom postings, just as bricks-and-mortar programs engage deadlines for submitting assignments. Both programs are similar in content, except in pace and quantity of content; online programs engage enormous content; and demand rapid progress. For this article, self-paced progression refers to movement “through” courses, rather than, movement “within” courses.

1. Avoid procrastination.
2. Plan & organize weekly coursework.

3. Set goals and manage time effectively.
4. Develop and engage good study habits, then practice them.
5. Keep up with assignments and post in a timely manner.
6. Allocate time in work schedule for rest, exercise, proper nutrition, and social interaction.
7. Participate in online discussions and check into courseroom based on course requirements.
8. Communicate with professors, as often as necessary.
9. Take keyboarding class (before beginning online class) if typing and computer skills are not proficient.
10. Take notes while reading and practice becoming a good note taker and developing outlines.

An Evaluation of a Personal Online Experience

The following is a response to an evaluation of an online program from a learner at the completion of a PhD program in 2008:

1. How does student/teacher relationships online compare to traditional classrooms?

When learners do not meet with professors face-to-face somewhere at any time during the course experience, especially during the writing of the master's thesis and dissertation, there can become a distrustful atmosphere for the learner/student. This in turn may lead professors to unnecessarily over-saturate learner production to help ensure the credibility of the learner's work.

2. Did your online course experience provide an appropriate environment for learning?

The online environment was fine but did not provide opportunities for appropriate reinforcement of concepts because of its fast paced nature. The lack of multisensory stimulation and presentation in the courseroom leaves little for engaging the different learning styles. The environment was appropriate but less effective in meeting the individual needs of each learner/student.

3. How is online teaching incorporated into the curriculum of your organization?

At my university, several departments have incorporated online courses with their curriculum offerings. These online courses did not replace any existing courses, but expanded offerings through the online medium.

4. What are the advantages/disadvantages of online courses?

The advantages of online learning are: Learning in safe and familiar environment; moving at personal pace; free of travel time and expense; convenience.

The disadvantages of online learning are: Too costly; little opportunity for personal contact; encountering geographical biases (some professors and students from other areas of the country or world cannot accept that learners from a particular location are educated and are capable of performing well and/or excelling academically).

5. How does online coursework help students achieve greater academic success?

Online learning may help students achieve greater success, but not necessarily academic success. The online experience can cause one to excel technologically, and become better equipped for today's job market since technology is fundamental to everything.

Online learning is not for everyone. Those students who are self-motivated, independent and self-disciplined may benefit from an online program.

6. How does teacher preparation impact online teaching?

I do not know how teacher preparation can impact online learning. But I think that online learning can impact teacher preparation. Because of online learning, teacher populations can be reached far and near with a computer and just the click of a button, cost effectively for professional development, short term workshops, mini conferences, tutorial learning, online conferences, etc. Sky's the limit.

7. How cost effective is online coursework?

Online coursework is not cost effective for learners in degree programs who maintain an extended stay. Online learning is convenient, but too expensive.

Evaluation of an online program at degree completion is an effective means of collecting information to enhance student learning and provide improvement in the overall program. The data collected from student evaluations can also provide educational institutions and faculty with valuable information for faculty improvement. Evaluations should focus on improving the quality of teaching and help to ensure that instructors have the necessary resources and learning opportunities they need to be most effective in the online environment

Conclusion

Design and delivery of online courses that embrace community, curriculum, and assessment, as well as actively engage students in the learning process are significant for sustaining and building the online program. Effectiveness in the online environment points out the importance of being supportive and contributive to a sense of togetherness for development of relationships and overall success of coursework. Students' interest in a course and relevance of the content influences their work performance for achievement of goals for the course.

Professional development can play a crucial role in preparing teachers to integrate technology and learning into an educational environment that encourages interaction, meaningful

involvement and a connectedness to other learners, as well as the international community. An efficient online learning environment demonstrates technology-rich, research-based instructional and learning strategies that facilitate learning, and classroom management within the courseroom experience.

The electronic movement has evolved into a science which engages best practices; some from bricks and mortar institutions, and others which emerged from a highly diversified cultural, academic, and geographical cohort of learners. The online learning environment, once devoid of personal communication, is now inundated with approaches that help students feel a sense of community and partnership while meeting their learning needs. In online programs, learners experience a paradigm shift from literal involvement in academic pursuits, to both virtual and tangible realms of scholastic pursuits within a virtual community of learners with a common goal of meeting their educational needs while networking with others.

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