

Issues in the Ethics, Technology, and Quality of Distance Education

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“Ensuring quality higher education is one of the most important things we can do for future generations. “

--Ron Lewis

The words of Ron Lewis address an important issue that affects not only our country, but world as a whole. Education leads to the development and advancements of mankind. Whether it be discovering a cure for a deadly disease or solving social issues, education plays a part in every aspect of our lives. As we continue to excel in numerous fields such as science and art, a need to preserve this knowledge and share it with the next generation for them to grow from is of upmost importance.

In order for the next generation to receive this knowledge and become educated, the method of delivering this knowledge must be taken into account. The overall setting of the learning environment affects how someone obtains, retains, and applies the knowledge given. Emphasis must be placed on this as the incorrect method of delivering knowledge may be incorrect, leading to a knowledge gap between generation, and ultimately slowing down the advancements of humanity. Distance education, also known as distance learning, is a form of education that has changed through time, as well as its methods of providing knowledge.

Distance education is a method of providing knowledge to those who are physically “not on site”. It has existed since the 1720s, through the use of letters and mail as correspondence between the instructor and student (Holmberg, 2005). As technology advanced, so did the methods of educating students in distance learning programs. Today, the computer and internet are the front-runners in being quick, efficient, and flexible distance learning tools (Gold, 1999). As a result, enrollment in these programs has skyrocketed to more than three-hundred million

students today, with a calculated growth of eighteen percent by 2013 (Hiltz, 2005) (Education Center Online, 2008).

As enrollment in distance education programs continue to rise, actions must be taken to ensure that the quality of that education is equal or exceeds that of traditional education methods. Despite the difference in delivery and environment, both distance and traditional education share aspects that affect their quality (Hiltz, 2005). However, the difference in the learning environment that distance education is in results in several problematic issues that are hardly found in traditional education environments.

Issues such as cheating, technology hurdles and quality arise with distance learning. While cheating and technology cause a hindrance on the quality that a student receives from a distance education program, the quality affects students in the long-run when entering the work-force. It leaves students without the proper skills and knowledge required for the jobs they intend to seek with the education they received from distance education programs. Therefore, distance education programs should be put under immediate evaluation before becoming open for the public to enroll and receive course credit.

In the practice of learning and assessing knowledge in a traditional classroom, there are four norms to ethical practice: honesty, keeping your word, respect for others, and fairness (Gearhart, 2005). These norms must also apply to distance education as well. Today, students are raised in an era of declining public morality, filled with scandals and corruption from major corporations and head figures. As a result, three fourths of students have sought cheating as an alternative to achieving their goals (Gearhart, 2005). In addition, pressures for good grades and

success have also clouded students' judgments when it comes to making the ethically correct choice.

Certain aspects in the distance learning environment contain windows of opportunity for students to cheat. One of the most obvious is the lack of interaction between the instructor and the student. During face-to-face interactions, inappropriate and unethical behaviors can be immediately spotted (Gearhart, 2005). However the lack of face-to-face interaction makes these behaviors feel less personal because the student cannot see how their actions hurt others (i.e. "out of sight, out of mind"); this results in a chance to cheat (Gearhart, 2005). In addition, traditional moral values learned at home are usually enforced at a traditional school; with distance education, this enforcement does not exist (Gearhart, 2005)

This learning environment also assists in cheating on assignments and tests. One of the most popular methods to accomplish this is by e-cheating, or using the World Wide Web to assist in cheating (Rogers, 2006). In e-cheating, students can use email and instant messaging services to share information pertaining to online tests and homework with other students. Other known methods include seeding the test computer with answers and using non-exam data disks containing the solutions to online exams (Rogers, 2006). One simple example, which also occurs in traditional education as well, is having another person complete the assignment or take the exam. Since the instructor cannot proctor the students, there is no way to distinguish whether the student or a colleague did the work (Gearhart, 2005).

Despite these problems in academic integrity, several instructors have noted that they are aware of these cheating methods. However, they have failed to take action and use simple,

preventative measures to combat it (Rogers, 2006). For example, these same professors admitted to using multiple choice-based exams for their courses. Out of all the implementations possible for exams, multiple-choice is the easiest to cheat on as there is no signs that would lead to speculation of cheating (Rogers, 2006). It is not a matter of extra burden on the instructors to seek preventative measures, but, easy, obvious choices that take a matter of minutes to decide (Rogers, 2006). Even for the instructors who do take these measures, there are several lacks in software safeguard to prevent cheating. For example, HTML documents in distance learning software can still be copied and shared with others (Cordova, 2007). In addition, the lack in window locks to prevent students from moving away from the window with the test to a window with a communication tool, such as email or instant messaging (Cordova, 2007).

Since there is a lack of face-to-face interaction between the instructor and the students, technology plays a significant role in establishing alternative communications. Technologies such as Blackboard, email, instant messaging have bridged this apparent gap. While these alternative methods are numerous and helpful, they are not up-to-par with verbal and writing communication that is prevalent in traditional educational settings (Lawhead, 1997).

For example, receiving and grading assignments has become a cumbersome task for instructors (Lawhead, 1997). Instead of simply being handed an assignment, an instructor must open the email from the student, download the assignment attached, evaluate it, comment and make suggestions, reattach and send back to the student. In addition, the more students that enroll, the more stressful and time-consuming this task becomes for the instructor. In a study conducted by Joan Kleinman at Middlesex Community College, instructors have noted that it has

lead to a slower response time in returning work (Kleinman, 2002). This would have negative effects on the students as they cannot build their skills from any feedback for a while. In addition, the use of email makes communication much slower, as the instructor must think carefully as to what to send out, in order to make sure that their instructions or announcements are clear and would not raise questions later or create confusion (Kleinman, 2002).

Despite the connotation that technology is helpful, not everyone is accustomed to it. This provides an obvious disadvantage to those who cannot overcome the technology hurdle that is prevalent in distance education programs (Kleinman, 2002). During the study of Middlesex Community College's online visual basic course, it was discovered that the dropout rate in a computer science distance learning course was three times that of a traditional learning course (Kleinman, 2002). It has been speculated that the numerous software requirements and the learning environment provided too much stress for those who dropped out of the distance learning course. In addition, technology used in certain distance education courses may not be compatible for certain students, simply because of system requirements (Gal-Ezer, 2007).

Due to the fact that distance learning programs require a significant use of electronic technology and equipment, the issues of costs and budgeting arise (Lawhead, 1997). The cost of developing a distance learning education program is tremendous, particularly with the purchase of the equipment needed. The numerous work hours, equipment requirements, and need of faculty to create a distance education program result in a higher cost compared to one of traditional education (Lawhead, 1997).

In addition to the budgetary costs mentioned, developers must also take notice to copyrighted material. The costs for equipment will certainly lead to distance education program

developers to seek methods to lower their budgets. One of these is to use copyrighted material as sources in creating a course (Lawhead, 1997). However, they must beware of possible infringement, as any violation could lead to lawsuits. As a result, distance education programs must also manage content integrity of materials and issues of copyright. This applies to lectures, readings, videos, and photographs used in the course (Lawhead, 1997).

The quality of the education a person receives is of utmost importance when it comes to successfully learning the skills required for the job they are seeking. Distance education programs attempt to circumvent the process instilled in traditional educational programs. One of the most obvious is the lack of an admissions process (Kaczmarczyk, 2001). The lack of any admissions policy immediately questions the quality and intentions of the program. An admissions process is used to determine which people will proceed to make quality contributions to the educational institution, furthering knowledge and making new discoveries. An institution without this exclusiveness leads to speculation that the program's first priority is to make profit; it gives the impression that the student is a client, and that the institution's activities dominate the design of the program (Kaczmarczyk, 2001). While it is in every educational institutions interest to make profit, it is the quality and its maintenance that should be their top priority indefinitely.

Similar to cheating, lack of interaction in the learning environment of distance education also has a negative effect in quality. Because of the lack of interaction among students, there has been an objective to instate it into the distance education program (Kleinman, 2002). For example, several instructors at Middlesex Community College have made communicating amongst each other a requirement for passing the course. While this may be seen as a way to rid

the program of its isolating nature, survey results from the same course saw the requirement not as useful and did not apply to any of the course material, resulting in wasted time and effort in learning (Kleinman, 2002). In addition, the easiness to multiple-choice assignments and exams has also led to lack of assessment in the material learned throughout the course (Lawhead, 1997). Though instructors are not required to use other testing methods, such as essay questions, their choice is most likely because of the numerous students that do sign up for distance learning courses, and that it would most likely take a longer time to grade and critique other forms of testing (Nelson, 2005).

Another important issue that arises is accreditation. Education accreditation is a process of quality reassurance. The organization that handles this process, for Higher Education Accreditation (CHEA), evaluates several aspects of an institution to ensure they meet the standards and criteria established (Kaczmarczyk, 2001). Their objectives are to chart new methods and means for educational programs to deal with increasing problematic issues (Kaczmarczyk, 2001). If issues such as e-cheating and monetary constraints on equipment arise within a distance learning program, the quality and possibility of accreditation approval decline. In a positive light, this may help distance learning programs seek out methods to meet the standards. However, if accreditation approval is not given, this results in students taking classes to lose course credit, delaying or destroying their dreams to graduate from a program as well as knowing they were not receiving quality education (Kaczmarczyk, 2001).

Though there are instances and windows of opportunity that allows students to cheat, there are several methods to which this can be combated. One simple solution is the use of anti-cheating software. Programs such as the Respondus Lockdown Browser prevent copying

material from the screen to paste and send in an email or through instant messaging (Cordova, 2001). In addition, anti-plagiarism tools such as turnitin.com can be used in the same way traditional programs utilize them. For exams, programs exist that can monitor a student's computer screen and allow the instructor to catch e-cheating (Rogers, 2006). Another method is to time-limit tests, hindering students from seeking outside sources, as they would be time consuming (Cordova, 2007).

While these programs do provide better prevention of cheating, there are several weaknesses this proposition. The cost of purchasing the software, in addition to the already large cost for the equipment to use it on, provides little incentive in adding more to the budgetary constraint (Lawhead, 1997). In addition, timed exams still allow student to cheat despite the added obstacle; a resourceful student could have the ability to seek the answers needed in time (Cordova, 2007).

Another method to combat e-cheating is to require student to attend a testing center, where instructors or proctors are physically present with the students as they take their exams. While this would deter cheating, it defeats the reason why distance learning existed in the first place (Nelson, 2005). Student enrolled in these programs did so because of the flexibility given and the lack of need to commute to a campus and instructors in the area. It defeats the purpose of providing education to those without those means to learn at a traditional educational institution (Nelson, 2005).

To ensure that e-cheating does not occur, while still ensuring quality in the education, is requiring written assignments rather than tests; doing so will enhance the student's understanding of the material (Nelson, 2005). In addition, websites, such as turnitin.com mentioned earlier, will

prevent plagiarism from occur when the assignments are being graded. However, as mentioned earlier, writing assignments in distance learning programs will result in slower feedback time for students (Lawhead, 2007).

Despite the occurrence of e-cheating in distance education programs, it is not one of the leading concerns when using distance learning tools according to a survey of professors who have used WebCT (Rogers, 2006). More emphasis was placed on quality of the program as well as delivery of the material and teaching. However, cheating does indeed affect the quality of program, as should be taken into account considering the emphasis of quality these professors stated. If cheating is overlooked, students could graduate with a degree they did not work for, nor apply the skills the course they were enrolled in was attempting to teach (Hentea, 2003). Not only does this give certification to people who do not fully possess the skills and knowledge required in the workforce, it also has these people jeopardize their careers as their lack of skills and knowledge will ultimately lead to unemployment. Though students should always apply honesty to their work, it is also the responsibility of the educational institution to enforce these morals (Hentea, 2003).

The technology instilled in distance education opens many doors for those with limited access to education. Because these programs are accessed through a computer with internet access, people can take courses from remote areas that do not have qualified instructors or have small numbers of students that would not make hiring an instructor cost effective (Roach, 2006) (Kleinman, 2002). In addition, the World Wide Web is accessible from almost any computer and operating system, giving platform independence as well as several methods of communicating and sharing information (Darbhamulla, 2004) (Krichen, 2007). One of the most noticeable

aspects of distance education is the flexibility allowed for its students, especially those who are raising children and have jobs, who make up the majority of the student enrolled in these programs (Kleinman, 2002).

While these programs are cost effective to the students enrolled in them, it must be noted that the costs to implement such a program are enormous. As technology evolves quickly, technology of yesterday will become obsolete, requiring the purchase of newer technologies for distance learning programs (Lawhead, 1997); this evidently leads to a majority of the budget focusing on equipment rather than the course and the quality of the material it entails.

As mentioned previously, quality is the top priority in any educational institution. Despite their lack in admissions policies and procedure, distance education provides students, particularly those who have children and jobs, to seek out the education that they would not otherwise obtain in a traditional education setting (Krichen, 2007). Also, students appear to be satisfied with the online courses, and also willing to recommend them to other students, according to a survey conducted by Joan Kleinman of Georgia Southern University (Kleinman, 2002).

Testing scores and course averages on online classes were also slightly better than those in traditional classes (Kaczmarczyk, 2001). In high schools, students who have taken Advanced Placement (AP) courses online had earned better scores on their Advanced Placement exams (Rouch, 2006). However, the distance education institution must be carefully investigated in terms of quality. Despite accepting anyone to enroll, one must wonder whether it is because the institution wants to provide quality education or simply earn profit from a targeted group of consumers who desire education (Lawhead, 1997).

As distance education becomes an increasingly more popular method of obtaining knowledge, certifications, and degrees, educators, administrators, and student alike must do their part to ensure that the education provided is of high quality. The vulnerabilities present in modern distance education programs hint that their academic integrity and stability does not conform to the standards that traditional educational institutions have upheld. Serious consideration and evaluation must be used before any educational program is allowed to open its doors to the public. Not only is this to provide fairness and equality or to consider monetary constraints, it is also for the good of humanity's future. Should the declining quality in the delivery of education continue, the next generation will not advance or exceed that of the previous generation, as it and other generations before have done to their predecessors.

References

- (2004). Distance learning statistics. Retrieved July 11, 2008, from Education Center Online Web site: <http://www.educationcenteronline.org/e-Learning/Distance-Learning-Statistics.html>
- Wikipedia: The free encyclopedia*. (2004, July 22). FL: Wikimedia Foundation, Inc. Retrieved July 10, 2008, from http://www.wikipedia.org/wiki/Distance_education
- Cordova, Jose L., & Thornhill, Paula (2007). Academic honesty and electronic assessment: tools to prevent students from cheating online. *JCSC*. 22, [52-54, 3].
- Darbhamulla, Ravi, & Lawhead, Pamela (2004). Paving the way towards an efficient learning management system. *ACMSE*. [428-433, 6].
- Gal-Ezer, Judith (2007). Reflections on distance learning. *Distance Education*. 39, [21-22, 2].
- Hentea, Mariana, Shea, Mary Jo, & Pennington, Lisa (2003). A perspective on fulfilling the expectations of distance education. *ACM*. [160-167, 8].
- Hiltz, Starr R., & Turoff, Murray (2005). Education goes digital. *Communications of the ACM*. 48, [59-64, 6].
- Holmberg, B (2005). The evolution, principles and practices of distance education. Oldenburg, Germany: Bibliotheks- und Informationssystem der Universität Oldenburg.
- Kaczmarczyk, Lisa C. (2001). Accreditation and student assessment in distance education. *Communications of the ACM*. [113-116, 4].
- Kleinman, Joan, & Entin, Eileen B. (2002). Comparison of in-class and distance-learning students' performance and attitudes in an introductory computer science course. *CCSC: Northeastern Conference*. [206-219, 14].
- Krichen, Jack P. (2007). Investigating learning styles in the online educational environment. *ACM Article*. [127-134, 8].
- Lawhead, Pamela B., Alpert, Elizabeth, Bland, Constance G., Carwell, Linda, Cizmar, Dawn, & DeWitt, Jean (1997). The Web and distance learning: what is appropriate and what is not. *SIGCSE*. [27-37, 11].
- Nelson, Michael, Settle, Amber, Shaffer, Dale, Miles, Gail, Watts, Jake, & Webber, Robert P. (2005). Online teaching practices (both best and worst). *JCSC* 21, [223-230, 8].
- Rogers, Camille F. (2006). Faculty perceptions about e-cheating during online testing. *CCSC: Southeastern Conference*. [206-212, 7].
- Rouch, S Students and teachers go to the distance for learning. (2006, Sept 22). *The Point*, p. 21.