

11-1-2011

Considering Quality Control in Distance and Online Education: A Commentary

Richard Roe

Big Sandy Community and Technical College

Follow this and additional works at: <http://encompass.eku.edu/kjectl>

Recommended Citation

Roe, Richard (2010) "Considering Quality Control in Distance and Online Education: A Commentary," *Kentucky Journal of Excellence in College Teaching and Learning*: Vol. 8, Article 7.

Available at: <http://encompass.eku.edu/kjectl/vol8/iss1/7>

This Article is brought to you for free and open access by the College of Education at Encompass. It has been accepted for inclusion in Kentucky Journal of Excellence in College Teaching and Learning by an authorized administrator of Encompass. For more information, please contact Linda.Sizemore@eku.edu.

Considering Quality Control in Distance and Online Education: A Commentary

Richard Roe, Big Sandy Community and Technical College Prestonsburg, Kentucky

Abstract

Quality control measures are needed in distance education. The author examined the strengths and weaknesses of course delivery in distance education and provided recommendations for a successful series of steps that should be followed in course development to assure quality control. Quality control measures can become valuable tools to enhance the educational delivery of distance and online coursework and develop the professional competence of instructors. Measures can range from course oversight by trained personnel, to mandated components that are common within all courses. New technologies especially in rich multimedia and asynchronous communication methods allow for increased learning opportunities. Students can have access to a vast wealth of content available over various media, and if correctly designed and navigated, take control of their own learning. However, quality high-value learning will not take place unless common design elements are put into place for all distance learning courses. These elements include rich multimedia, asynchronous communication, and the mentoring of faculty that teach distance and online courses. Distance learning is gaining momentum in higher education. The student of today would select a distance or online course over a formal class if given the chance to choose. The literature on distance education and online learning is growing and this contribution will add to that body of literature.

Keywords: Distance Education; Online Learning; Quality Control.

Introduction

Distance education consists of an amalgam of pedagogy, technology, and instructional design systems that are used to deliver education to students who are not physically on campus or in a formal classroom. In other words, distance education takes courses to students rather than having them travel to a designated physical location or classroom to attend classes. Hybrid, or blended courses are taught using both face-to-face and distance-oriented methods. Two types of technologies used in distance education are synchronous and asynchronous.

Synchronous technology requires all students to “attend” class at the same time. Asynchronous technology offers students the freedom to “attend” class activities at their convenience within a prescribed timeframe. Direct-satellite, telephone, web-based VoIP, internet radio, teleconferencing, video-conferencing, live-streaming, and virtual classroom are examples of synchronous technology. Asynchronous technology includes audio-cassettes, video – cassettes/DVD, email, discussion-boards, message-boards, voice-mail, print materials,

and blogs. The list on each type of technology is not exhaustive. Learning Management Systems or Learning Content Management Systems such as “Blackboard” can be used for both synchronous and asynchronous learning. The increasing popularity of MP3 players, PDAs and smart phones are becoming increasingly popular and have provided additional media for the distribution of distance education content.

Advantages of distance education include – expanding educational services to students in remote areas, reducing costs for educational institutions and organizations, providing opportunities for institutions to adopt new technologies, and expanding an alumni-base for donations and financial contributions. Disadvantages include testing and evaluation. It is difficult to verify whether a registered student is completing assignments and examinations, or whether someone else is doing them on behalf of the enrolled student. It is important to maintain academic rigor and integrity while delivering instruction by using available educational technologies. Quality control is synonymous with “quality assurance” which is defined as “the totality of processes and

procedures adopted and implemented by an organization to maintain quality, integrity and efficacy in teaching and learning.” Many educational institutions and organizations provide technical training and support for faculty and students involved in distance education.

Distance and online education have gained momentum and have expanded educational opportunities to many students around the world. However, there is need for a more definitive set of best practices to be adopted by all concerned. Students and instructors are not bound by rules and regulations stipulating specific requirements for teaching or learning in distance education. However, specific practices could be provided to enhance teaching effectiveness and optimum learning. Technology supporting asynchronous communication, email and discussion boards followed closely with rich multimedia tools can facilitate student learning. Quality control is important in this process.

History of Distance Education

Distance education began decades ago with delivery of course materials to students via the postal service (Casey, 2008). Beginning as early as 1881, the Chautauqua Correspondence College designed courses that were delivered to students living at a distance from the campus. Students received the materials, completed the required work at their leisure, and then returned their work to the College for evaluation and grading. This school via correspondence provided opportunities for students who would have otherwise been left out of the educational system because they lived far away.

Other early projects in distance education followed the same design. The extension division at the University of Chicago was launched in 1892 to allow students at a distance to gain a college

education. Other mail-order type educational programs developed after this and have continued ever since. The correspondence and extension methods of instruction, however, were time consuming and raised many quality concerns. For example, an instructor could not verify that the named student and not someone else submitted the work. Such issues raised concerns about the quality of these types of education.

With the expansion of television and other forms of media during the last decades of the 20th century, new forms of distance education emerged. Students would receive video tapes of lectures and packets of work to complete or be required to view lectures or demonstrations broadcast on local and state television channels. As with the traditional mail-order programs, video brought material to the student in a compact format that was easy to transport.

The computer revolution soon ushered in the age of digital media, which allowed content to be provided in a format that was easily delivered and readily available at any time. Digital media broadened the scope of distance education from its humble beginnings of mailed materials taking long periods to receive and return, to instant anytime-anywhere delivery. Distance education is now a major vehicle for delivering courses offered by many colleges and universities via the World Wide Web and other methods. Programs of study have grown from a single class being taken toward a high school diploma to doctoral degrees offered completely by distance education (Bejerano, 2008). With its explosive growth, issues over quality and suspicion about its effectiveness continue to grow (Foster & Carnevale, 2007; Haugen, LaBarre, & Melrose, Unknown; Hirschheim, 2005).

Case for Quality Control

Many mission statements espouse student success and quality in the classroom. However, more and more classes are being offered via distance education. This creates a potential contradiction between mission and action that in turn pits supporters of distance education against the rivals who question the quality of this instructional mode. Thus, colleges attempting to meet the demand for distance education programs must focus on quality instruction.

Competition for increased tuition dollars and high enrollment has led many to question the effectiveness and quality of distance education. Profit-making organizations have been accused of taking advantage of the demand for diplomas that could be earned within a short time.

Quality Control Defined

Quality control can be defined as a set of standards that apply to each course offered via distance education. These standards should influence the design and layout of the course and the amount of content being presented. Quality control in business consists of measures, procedures, processes and techniques that sustain a level of quality within an organization. It can be defined as procedures and processes that facilitate a high level of teaching and learning in the context of education.

Need for Quality Control

The rapid development of telecommunications along with the expansion of distance learning technologies is leading the way for innovative delivery systems of education—particularly at the postsecondary level. Quality control must evolve to fit the needs of these learners (Egan & Akdere, 2004). Foster and Carnevale (2007) reported that approximately 3.2 million students were enrolled in at least one distance or online

course during 2005. This was a 39 percent increase from Fall 2004 semester. Distance and online courses are taken by students spread across age, education level, and profession (Sandon, 2007). With such wide acceptance of the distance education and online mode for educational attainment, quality control is a key element to insure the integrity of course content and faculty efficacy and professionalism.

Universities will transfer courses from junior colleges without question, if they are assured of the quality of such courses. The quality of student-to-student and student-to-instructor interaction may be higher in traditional face-to-face instruction (Haugen et al, Unknown). Therefore, successful distance education would require higher quality control measures that are at par with those in the traditional classroom.

Recommendations for Quality Control

Distance and online education courses should contain key sets of items to enhance content. Three key components to developing quality distance and online courses are - inclusion of rich multimedia, asynchronous communication, and mentoring of faculty who teach these courses.

Research has shown that multimedia rich course content can attract learners and keep their attention (Sun & Cheng, 2007) by providing multiple learning avenues. Video, audio and other interactive tools give the student a level of interaction with the course they are taking. Interactive content also provides today's internet ready students with the possibility of attaining greater comprehension, recall and retention of course material.

Multimedia give learners different avenues by which to accumulate knowledge. Multimedia also give students readily available material that can be instantly accessed. Students also benefit from

multiple formats of material based on their unique learning styles. Knowing that students have multiple learning styles ranging from auditory, visual and tactile, multimedia should be developed to suit all styles. Audio lectures give students who learn best in this style the opportunity to attain optimum learning. Students who are visual learners gain more from visual presentation and tactile learners can benefit from interactive multimedia. Therefore, rich multimedia should be part of any institution's requirements for distance and online courses.

Asynchronous tools should be part of distance and online course development. Asynchronous tools include elements such as email, discussion boards, document libraries, blogs and announcement areas that now are more accepted by students than they were in previous years (Minjuan, 2007). As a minimum, asynchronous tools should be required for any instructor wishing to teach a distance or online course. Instruction can greatly be enhanced when a combination of these tools are utilized or when common tools such as discussion boards are used by all faculty within a system.

Asynchronous tools can serve a distinct function of being a collective knowledge bin. Many asynchronous distance education tools such as discussion boards and document libraries gather knowledge from all participants and can be stored in a format that can be accessed by future students. This knowledge can be utilized by both faculty and future students to continue to expand the accumulated knowledge base of the course.

Society has adopted email for most communication. The postal service, which was once our primary tool for communications at a distance, has suffered from society's switch to electronic communication. Dialogue between students and students, and students and

professors has progressed from the face-to-face mode to the distance and electronic communication mode. Other asynchronous tools such as databases, polls, surveys, and calendars will continue to be used with greater frequency in distance and electronic teaching and learning.

The third suggestion is that faculty who teach distance and online courses should be paired with a veteran mentor for one semester. This mentoring should be provided by established instructors who have taught distance and online courses successfully. The process of mentoring will assure that faculty are technically literate, and are aware of the different modalities of distance and online instruction. Within the mentoring process, instructors who are new to online and distance education coursework should be exposed to all relevant technologies that are in place for communicating material to students. These technologies will include but are not limited to email, video feed, rss (really simple syndication), web page development, surveys, discussion boards, white boards, chat rooms, video conferencing and emerging new technologies. Mentoring also provides a way for the quality of the institution to be replicated by the beginning instructor.

Conclusion

Student success in distance and online courses consists of a combination of quality material and effective high-value teaching. Proper adherence to common use tools within distance and online courses allow systemic change to occur. Asynchronous communication tools, mentoring and rich multimedia are three tools that should be included in any college's development of distance and online courses. Mentoring gives faculty support structures to deliver the best material available to students while

providing teachable moments with new technology. Students benefit by having increased opportunity to learn with multiple methods of communication and quality multimedia. Colleges benefit by taking

advantage of opportunities to use state of the art technologies and become more competitive and efficient in teaching and learning.

References

- Allen, I. E., & Jeff, S. (2007). Changing the landscape: more institutions pursue online offerings. *On the Horizon*, 15(3), 130-138.
- Anstine, J., & Skidmore, M. (2005). A small sample study of traditional and online courses with sample selection adjustment. *Journal of Economic Education*, 36(2), 107-127.
- Baglione, S. L., & Nastanski, M. (2007). The superiority of online discussion. *Quarterly Review of Distance Education*, 8(2), 139-150.
- Bejerano, A. (2008). Raising the question: The genesis and evolution of online degree programs: Who are they for and what have we lost along the way? *Communication Education*, 57(3), 408-414.
- Bolliger, D. U., & Wasilik, O. (2009). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Distance Education*, 30(1), 103-116.
- Casey, D. M. (2008). A journey to legitimacy: The historical development of distance education through technology. *TechTrends: Linking Research & Practice to Improve Learning*, 52(2), 45-51.
- Cowan, K. (2009). Learning across distance. *Education Digest: Essential Readings Condensed for Quick Review*, 74(8), 4-8.
- Foster, A., & Carnevale, D. (2007). Distance education goes public. *Chronicle of Higher Education*, 53(34), A49-A49.
- Haugen, S., LaBarre, J., & Melrose, J. (n.d.). *Online course delivery: issues and challenges*. Retrieved from http://www.iacis.org/iis/2001_iis/pdf%20files/Haugen127.PDF
- Hirschheim, R. (2005). The internet-based education bandwagon: Look before you leap. *Communications of the ACM*, 48(7), 97-101.
- Minjuan, W. (2007). Designing online courses that effectively engage learners from diverse cultural backgrounds. *British Journal of Educational Technology*, 38(2), 294-311.
- Parry, M. (2009). Online educators won't be forced to spy on students, new rules say. *Chronicle of Higher Education*, 55(39), A19.
- Ragusa, A. T., Chan, A., & Crampton, A. (2009). Ipods aren't just for tunes. *Information, Communication & Society*, 12(5), 678-690.
- Sandon, L. (2007). A system for designing effective online education. *Journal of the American Dietetic Association*, 107(8), 1305-1306.
- Sun, P. C., & Cheng, H. K. (2007). The design of instructional multimedia in e-learning: A media richness theory-based approach. *Computers & Education*, 49(3), 662-676.

Richard Roe is Associate Professor of Information Technology, Big Sandy Community and Technical College, Prestonsburg, Kentucky.