Quality in Distance Education

A Triple Perspective

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Introduction

Distance education opportunities have become increasingly common in higher education (Rooney et al., 2006). In 2005, about 62% of the 2- and 4-year higher education institutions offered distance education courses (Rooney et al., 2006), up from 56% in 2001 (Waits & Greene, 2003). In addition, enrollment in distance education courses exceeded 3.18 million in 2005 (Allen & Seaman, 2006), up from 2.35 million in 2004 (Allen & Seaman, 2005) and 1.98 in 2003 (Allen & Seaman, 2004).

In response to the growing demand for a clear definition of quality in distance education, different organizations have provided guidelines and standards (American Distance Education Consortium, 2003a, 2003b; American Federation of Teachers, 2000; Chickering & Gamson, 1987, as cited in Chickering & Ehrmann, 1996; Phipps & Merisotis, 2000; J. C. Moore,

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2004; The Quality Assurance Agency for Higher Education, 1999; Western Cooperative for Educational Telecommunications Project, 2003). A review of the published standards reveals a high degree of congruence among them (Twigg, 2001b). A successful education is associated with a number of factors. The quality of the learning experience, and the expectations that learners bring to the table are among the most important ones (Rooney et al., 2006).

The present article focuses on providing perceptions of quality in distance education from the perspective of faculty, students, and administrators. The setting of this report is three institutions of higher education that have embraced distance education. Two representatives from each constituency were interviewed on their perceptions of quality in distance education, with a focus on building relationships, feedback, and the future of distance education. This article is relevant for educators and administrators interested in understanding quality in distance education at their institutions.

Diffusion of Innovations

The theory of diffusion of innovations (Rogers, 1962), provides the foundation for understanding adoption cycles and provides the labels to describe the population. "Adopter categories are the classifications of the members of a social system" (Rogers, 2003, p. 297).

Rogers's Adopter Categories

Rogers (2003) uses five categories: innovators, early adopters, early majority, late majority, and laggards.

Innovators

Innovators are obsessed by innovations. They tend to be risk takers and are able to adapt and cope with innovations. This attribute requires innovators to have the

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ability to understand and apply technical knowledge. As new ideas are introduced, innovators tend to cope well with failure and setbacks.

Early Adopters

Early adopters are more integrated within a social system than innovators, which allows them to become change agents for the innovation taking place (Rogers, 2003). Early adopters tend to be looked upon as opinion leaders by other potential adopters within a social system (Rogers, 2003). Individuals who are currently engaged in distance education fall under the category of early adopters.

Early Majority

The early majority adopts innovation just before the average member of a social system. The early majority interacts frequently with peers but seldom holds positions of opinion leadership within a social system (Rogers, 2003). The early majority will deliberate extensively before completely adopting a new idea. The innovation-decision process period for this group tends to be longer than for innovators and early adopters.

Late Majority

The late majority adopts new ideas after the average member of a social system. Adoption by the late majority is a result of socioeconomic and peer pressure (Rogers, 2003). They tend to be skeptical and cautious, and require uncertainties to be removed before adopting the innovation (Rogers).

Laggards

Laggards are the last to adopt innovations within a social system (Rogers, 2003). They tend to be isolated and do not participate in social networks within a social system. Experience is their point of reference; they tend to be suspicious of innovation and change agents. The innovation-adoption process is relatively lengthy. Resistance to innovation may be entirely rational from the laggard's viewpoint.

Postsecondary educational institutions are facing many challenges, including decreased enrollments, increased competition, and a reduction of government funding. As the cost of postsecondary education increases, technological innovations used in both teaching and learning have become a stabilizing factor for increasing productivity while keeping administrative costs down (Massy & Zemsky, 1995). Advances in technology have generated a boom in the development and application of online education in post secondary institutions.

Faculty members are being pressured to integrate technology into their instructional activities by administrators trying to keep up with new technological advances, from students who are becoming increasingly insistent that technology be integrated in their courses, and colleagues who are considered "innovators" (Rogers, 2003) of instructional technology and always willing to spread its advantages to "laggards." Faculty members adopt online technology either into face-to-face (Sun, 2004), hybrid (Sands, 2002), blended (Alvarez, 2005), or mixed delivery courses (McFadden, 2004).

Quality in Distance Education

Based on management and engineering concepts of quality, Reid and Robertshaw (1991) define quality in distance education as "fitness for [the] purpose [of] successful learning by means of distance education methods" (para. 1). It is common to frame the definition of quality as fitness for purpose (Reid & Robertshaw) from the point of view of the customer. In education, the term customer often refers to the student. However, there is an important distinction between customer in a purchaser-supplier relationship and service provider meeting

the needs of a student (Tait, 1997). Moreover, defining "fitness for purpose" from the sole point of view of the student is too narrow and may lead to misunderstandings (Murgatroyd, 1996). Instead, the phrase raises two important questions: fitness for whom, and for what purpose (Perraton, 1995; Twigg, 2001b)?

As the distance education options increase, so will students' interest in quality. Quality, as Cress (2005) and Smith (2004) point out, will become the standard by which students choose a program.

Diffusion of Innovations and Quality in Distance Education

Much effort has been devoted to reach a consensus on what constitutes quality in distance education (Abel, 2005; American Distance Education Consortium, 2003a, 2003b; American Federation of Teachers 2000; Chickering & Gamson, 1987, as cited in Chickering & Ehrmann, 1996; Frydenberg, 2002; J. C. Moore, 2004; The Quality Assurance Agency for Higher Education, 1999; Western Cooperative for Educational Telecommunications Project, 2003). Each constituency is working to define a set of standards, based on their understanding and evaluation of the issues involved in providing an environment conducive to learning. Many believe that consensus is necessary because distance education transcends local, regional, and even national boundaries (Calder, 2000; Hillesheim, 1998; Twigg, 2001b).

Rogers (2003) states that during the adoption process an individual is introduced with a technological innovation which necessitates the amassing of specific relevant data and the opportunity to test the new technology. This evaluation process is designed to determine whether the innovation offers a sufficient improvement to merit the investment of time and energy that is required to integrate the new technology into the individual's inventory of skill sets. Quality is the great influencer of this decision-making process. The characteristics and levels of quality impact the evaluation of the efficacy of the integration of technology in the proposed environment as to whether it is a valid alternative to the traditional educational experience.

Entering the Mainstream

Quality in distance education has been analyzed extensively using a top-down approach: one that considers the infrastructure, the design of the course, the support services available to students, and other hygiene factors conducive to help students complete their degrees (Ortiz-Rodriguez, Telg, Irani, Roberts, & Rhoades, 2003). Other studies have concentrated on analyzing the learning as a result of online dialogue (Haavind, 2004).

Clark (2001) argues that "no one media attribute has a unique cognitive effect" (p. 131). He further suggests that researchers should stop looking for a relationship between media and learning until a new theory is brought forward. It is important to continue searching for the most effective way to reach students, to facilitate the way for them to learn. Kozma invites researchers to move away from "Do media influence learning?" to "Will media influence learning" (Kozma, 1994, as cited in Clark, 2001, p. 179). Clark and Kozma propose a focus on effective and efficient ways to provide quality in distance education, which have little to do with the delivery mechanism, and more to do with teaching strategies designed to encourage analysis and understanding.

Simonson (2005) points out that if distance education is to enter the mainstream, quality must be in the mainstream as well. Delivering quality e-learning represents a considerable monetary investment for the institution that offers it, and requires faculty willing to invest time to use it effectively.

Constituencies in Distance Education

Each constituency brings a different agenda to the table: the students, the administration, and the faculty. Harvey and Green (1993) contend that "this is not a different perspective on the same thing, but different perspectives on different things with the same label" (p. 9).

Faculty

Many studies (Abel, 2005; Allen & Seaman, 2003; American Federation of Teachers, 2000; Perry, 2003; Puffer, 2005; Smith, 2004; Sumrall, 2002; Twigg, 2001a; Zemsky & Massy, 2004) provide evidence of the perceptions of faculty about what constitutes quality in distance education. One of the reasons why distance education has not yet become mainstream lies in the faculty. Early adopters maintain that distance education has the ability to foster independent study, while laggards remain skeptical because they believe that "teaching and learning are inherently social processes," where "'same-time same-place' interaction [is] central to a successful educational learning experience" (American Federation of Teachers, 2000, p. 5).

For some faculty members, venturing online constitutes transferring the learning materials they have developed for traditional settings online (Weigel, 2000). Students, on the other hand, may have different expectations. In addition, there is no guarantee that students will take advantage of all the learning materials provided. Faculty may be adding a great variety of materials, but if some students do not take advantage of them, can this still be defined as quality distance education? Learning needs to be a factor in measuring the quality of the education provided. As Zemsky and Massy (2004) contend, faculty must change the way they teach before e-learning becomes mainstream.

Faculty may be resisting the move towards distance education for reasons that have nothing to do with academics. Aside from a new set of skills, preparing content for online delivery requires a huge investment of faculty time. The question remains as to how the institution will acknowledge such effort. In 1990, the Carnegie Foundation for the Advancement of Teaching (Boyer, 1990) proposed a model to reward teachers for more than just "good evaluations" and amount of research. According to this model, activities such as service to the school community and engagement in new projects promoted by the school should also be considered scholarship.

Regardless of whether the course is taught face-to-face or at a distance, the teacher needs to be present both at the cognitive and at the social level (Beaudoin, 2002, Haavind, 2004). It is the teacher's responsibility to create a comfortable learning environment, where prompt feedback is the norm rather than the exception (Chickering & Ehrmann, 1996; Kirtley, 2002).

Faculty members have traditionally modified their teaching style and the mix of materials used based on student feedback. This is no different in distance education. Perry (2003) examined faculty beliefs about quality in distance education and their perceptions of what students believe about quality in distance education. The results of this study showed that faculty rated their beliefs about quality in distance education and other areas higher than they rated their perceptions of student beliefs in the same areas.

Students

Some studies (LaBonte, 2003; Mansouri, 2003; Ortiz-Rodriguez et al., 2003; Shepperd, 2002) have analyzed the perceptions of distance learners about what constitutes quality in distance education. Others have compared the perceptions of quality of online and traditional courses (Gottwald, 2005; Moret, 2004).

Education is a vital element of society. Individuals have two choices: adapt, or risk being replaced. In today's knowledge economy, individuals not only have to obtain the necessary foundation skills and keep them current; they also need to acquire new knowledge and skills if they wish to maintain their status quo. The fast-evolving pace of today's business environment demands that its workers become lifelong learners. Tuijnmam (2003) defines lifelong learning as the process of individual learning across a person's life span, from cradle to grave. Lifelong learning can occur in both a formal and an informal setting. A formal setting is provided by an educational institution. This is not only true for information technology professionals, but also for those who are expected to interact with the electronic and fully automated information systems available in one way or another (Richards & Garcia, 2006). For example, accountants and finance professionals must understand how information systems enable real-time information to make decisions regarding the productive use of the company's resources (Richards & Garcia, 2006). The need for education has expanded remarkably. Unfortunately, more often than not, these needs are at odds with the lack of time to pursue such endeavors. Today's workers and their sponsors expect on-demand learning services (Mariasingarn, 2005).

However, working professionals are not the only ones demanding online learning. Younger generations which have grown accustomed to technology expect to be exposed to the same level of technology in school as they do for entertainment. The digital divide so pervasive among baby boomers is not an issue for them.

Administration

Administrators at many institutions of higher education believe that delivering distance education costs less than traditional education. Moved by this belief, they invest heavily in new technologies. However, the cost of investing in expensive, cutting-edge technology requires a critical mass in order to be effective. A study of various methods of course delivery conducted by Neely (2004) revealed that the number of students enrolled in a course has a significant effect on the unit cost of a course per student. Thus, consistently running small classes will increase the time it takes the institution to amortize the initial investment in new technologies. In those cases, the total cost for face-to-face courses tends to be lower than for technology-delivered courses.

A common mistake when measuring quality in distance education is to equate success with increased enrollments. Quantity is not quality (Ström, 2004; U.S. National Commission on Libraries and Information Science, 2001). Concentrating on quantity will inevitably lead to commoditization of the education provided. If commoditization occurs, competition will focus on price, not on quality, which will undoubtedly have devastating consequences for those institutions that don't operate at the lowest cost in the market (Weigel, 2000).

Hemlata (2005) asserts that the four main issues encountered by administrators when implementing online education at their institution are sustainability, quality, organization, and learner support system. Administrators seem to agree to a systematic approach to online learning, one that must begin with a careful analysis and further strengthening of the mission statement of the organization (Hemlata, 2005).

A major risk in distance education endeavors is the tendency of some institutions to hire cheaper labor to reduce costs (Twigg, 2001a). Excessive use of teaching assistants and adjuncts may solve a problem in the short run, but the long-term cost in quality could be greater than what the institution might anticipate (American Federation of Teachers, 2000). First, the

control and responsibility for the curriculum will shift from the faculty to the administration, whose decisions are driven by financial interests. Second, most institutions don't have strong quality assurance systems in place to ensure quality when the faculty loses control of the curriculum (Twigg, 2001a).

Building Relationships

Recent research endeavors have studied the quality of the dialog among instructors and students, and the pedagogy of teaching at a distance (Angeli, Valanides, & Bonk, 2003; Beaudoin, 2002; Haavind, 2004; Swan, 2002). This pedagogy refers to the theory and practice of transactional distance: interaction among teachers and students, students and students, learning communities, and teaching and learning processes across time and space (M. G. Moore, 1973). In smaller universities, professors and students have a direct relationship; aside from teaching, the professors interact directly with students. In larger universities, this task is mostly performed by the teaching assistants.

M. G. Moore's theory of transactional distance (1980) places major emphasis on the student's role as an active learner. He indicates that students should define their own learning objectives, and are responsible for accomplishing those objectives. Moore's definition of distance encompasses two elements: dialog and structure. Dialog is defined as a two-way communication between teacher and learner. Structure is defined as the extent to which a program is able to respond to the needs of each learner. Successful distance learners are individuals who do not require close guidance, and are able to fill the gap that distance creates between teacher and student. Not surprisingly, Moore suggests that successful learners are likely to be experienced adults.

While the level of structure and class size may vary, relationships are at the cornerstone of quality in distance education. Open dialogue serves as a motivator and fosters deeper learning.

The Importance of Feedback

Technology provides many convenient methods for providing immediate feedback to both the learner and the instructor. Students are able to discover promptly not only how they did on a quiz or an exam but with the guidance of a faculty member, where to get supporting information on any subject related material. This constant and directed communication fosters a higher level of self-monitoring and accountability in students as they continuously monitor their individual progress. Students feel that quality feedback needs to be timely, personalized, motivating, and framed to inspire learning (Goldsmith, 2001).

Students usually gauge the success of a class based on the promptness and quality of the feedback provided. This is even more important at a distance, where students seek for a path to success. In the absence of face-to-face contact, faculty must rely on reviewing student work to assess the progress of the class. Feedback begins prior to the term's start date with a comprehensive syllabus and a set of well-defined rubrics.

Concluding Remarks

This article discussed quality in distance education from the perspective of three of the main constituencies at three institutions of higher education defined as early adopters: faculty, students, and administrators. The above discussion revealed that the multiplicity of views and issues in [distance] education make defining quality difficult (Mariasingarn, 2005). Quality is the responsibility of the institution, and it is up to the institution to include the different constituencies when agreeing in a set of standards.

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