This paper explores the issues surrounding quality in higher education and its necessary adaptation to the online world of educational delivery. A historical perspective on quality standards is presented, and characteristics of recent models for quality control are outlined. Quality-related issues in Walden University's (Minnesota) two new online, course based programs--a Ph.D. in Professional Psychology and a Master of Science degree in Educational Change and Technology Innovation--are discussed. Highlights include: (1) managerial quality/organizational criteria, including leadership and record keeping; (2) functional quality/technological criteria, including student support via process teams; and (3) ethical quality/instructional criteria, including the relationship between students and faculty, faculty evaluation, and student and faculty empowerment. (Contains 33 references.) (AEF)
Walden University has been delivering non-traditional graduate education to adult learners for 27 years. From 1970 until 1995 Walden granted strictly doctoral-level degrees utilizing a dispersed residency format. The dispersed residency model was once known as “open” or “correspondence” learning. Assuring quality in such a non-traditional, distance model was highly dependent on the quality of the faculty and the mentoring relationship established between the faculty member and the students.

However, with the increasing availability of technologically based means of communication and the rapid development and sophistication of distance education and distance delivery this all changed for Walden University. In 1995 new requirements were instituted for students and faculty grounded in telecommunications. In addition Walden University began offering two new online, course based programs. One a Ph.D. in Professional Psychology, the other an online Master of Science degree in Educational Change and Technology Innovation (ECTI). While these two course based, online programs did not change the mission and vision of Walden University, they clearly have affected the process, procedures and delivery of instruction at Walden University. This paper is an exploration of the issues surrounding quality in higher education and its necessary adaptation to the online world of educational delivery.

**Historical Perspective**

Quality standards and processes have been available in other industries for decades. These quality processes are highly sophisticated in the manufacturing industry with such well known scholars as Deming and Juran. However, many of the traditional quality models, in education, focused only on the pedagogical factors. The International Council for Distance Education said of quality: “The focus for designing quality distance education should be on the content, the learners, and the learning outcome” (Hardy, 1997). While this author would agree, it appears that this is not enough for a quality distance education program.

Keegan and Rumble in a 1982 study (Verduin & Clark, 1991) established quality indicators as the learner outcomes. Cooler (1979) in looking at quality and distance education felt the important variables were affective skills and the drop out rate. For many institutions, both traditional and distance, it was clear in reviewing quality there was disagreement on what should be evaluated (Verduin & Clark, 1991). Traditional quality standards often included entrance requirements, famous graduates, reputational rankings, illustrious faculty (West, 1984), the value added to graduates, and the level of involvement of students in academic and extra curricular activities. It is easy to see the similarity of these criteria with criteria of accrediting groups in their evaluation of academic institutions. Keegan and Rumble (in Verduin & Clark, 1991) established a set of criteria for distance institutions. These criteria may be useful for the non-traditional correspondence program but a shortcoming is the obvious lack of factors dealing with technology for today’s distance delivered programs.
Quality of the learning materials
Stability of the subjects taught at a distance
Cost effectiveness
The status of the institution

Recent Models
The American National Standards Institute recently applied the American Association of Quality Control international standards (ISO9001) to education and training institutes. These include both traditional and non-traditional delivery models.

- The curriculum specifies expected outcomes.
- Quality systems should be kept simple.
- Precise measurement is essential (quality control).

Only since the beginning of the 1990's have we begun to see the introduction of technology as an important criteria in the quality literature for distance education. However, an earlier reference to the importance to the delivery method by Baldi in 1976 stated, the "method of curriculum delivery serves a critical function in legitimizing such program" (In Poppenhagen, 1986).

- Materials must be learner friendly.
- Materials must be interesting.
- Materials must elicit the appropriate rigor.
- The materials must be relevant.
- The technology must be available.
- Teachers and students must be familiar with the distance methodology.

Hawkes and Dunning et al. Models
As the result of this attention to pedagogy, content and delivery a few authors have addressed the aspect of ethics as it affects quality in programs. Dunning, Van Kekerix, and Zaborowski in 1993 chose three criteria encompassing the functional, managerial and instructional quality of distance courses. Hawkes (1996) in Criteria for evaluating school based distance education programs discusses both the technological aspects of quality and the ethical aspects by discussing four criteria as critical. A comparison of these quality criteria is shown in Table 1. Ethical aspects of quality are a component of each model. Ethics as instruction and ethics as related to access issues.

By combining the Hawkes (1996) and the Dunning et al. (1993) models it will be possible to discuss the comprehensive quality model utilized by Walden University. As Lewis (1988) said "As learning systems become more complex quality control and service management of the customers experience will become increasingly important" (Moore, 1990, p. 53).

Managerial Quality/Organizational Criteria

How Does Walden University Lead?
One of the questions infrequently connected overtly to the quality of educational programs, especially online distance programs, is the question of leadership. However, the mission, vision, foundational values and leadership support the overall standards of acceptable
quality within any educational program. This is closely related to the allocation of resources for quality. Resources at Walden University include a dissertation editor, Quality Center of Excellence, an online writing center, and regular a program evaluation and review process. Commitment of resources to quality must be supported by the leadership of the organization.

Table 1. Quality Criteria

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<td>1. Functional Quality</td>
<td>1. Technological Criteria</td>
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<tr>
<td>a. Technical</td>
<td>a. Ease of use</td>
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<td>b. Design</td>
<td>b. Speed of Access</td>
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<td></td>
<td>c. Level of realism</td>
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<td></td>
<td>d. Flexibility</td>
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<td></td>
<td>e. Time place independence (Stubbs &amp; Burnham, 1990)</td>
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<td>2. Managerial Quality</td>
<td>2. Organizational Criteria</td>
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<td>a. Policy</td>
<td>a. Maintenance</td>
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<td>b. Leadership</td>
<td>b. Scheduling</td>
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<td></td>
<td>c. Support availability</td>
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<td></td>
<td>d. Staff development</td>
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<td>3. Ethical Quality</td>
<td>3. Instructional Criteria</td>
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<tr>
<td>a. Instructional aspects</td>
<td>a. Interactivity</td>
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<td></td>
<td>b. Integrative capacity</td>
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<td></td>
<td>c. Learner control</td>
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<td></td>
<td>d. Learner-instructor relationship</td>
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<td>e. Learner achievement</td>
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<td>4. Ethical Criteria</td>
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How Does Walden University Record Keep?

As is common to most educational institutions the gathering, storage and access to information is critical. Walden University is attempting to move toward greater amounts of electronic data as opposed to paper data. The institution supports an electronic student data base that includes all student information, course information, and research project/dissertation information. It also tracks application and registration information, the various approval and signature sheets necessary, advisor assignments, and changes in status. Separate programs support electronic portfolios for students, process checklists for quarterly events, periodic review information is collected for programs, and instructor evaluations are part of the continuous improvement process for faculty.
Functional Quality/Technological Criteria

How Does Walden University Support Students?

In March of 1997 Walden University re-organized into a process team model. Support and administrative functions were re-designed to fall within single process teams. Examples of process teams include: recruitment, admissions, orientation, finance, registration, progress, records, completion, and residencies. This student centered approach provides direct links for service to the graduate students of Walden University.

Ethical Quality/Instructional Criteria

How Does Walden University Teach?

This is one of the most critical components of a quality education program. Desmond Keegan (1993) in an article called *Theoretical Principles of Distance Education* discusses the importance of the relationship between the student and the faculty member. He feels it is "interaction for the purpose of identifying, understanding, confirming worthwhile knowledge" (p. 13). However what is "worthwhile knowledge"? "The difficulty with assessing the quality of distance education is agreeing on a common meaning or set of objective criteria" (Keegan, 1993, p. 10). While it has already been stated there a many influencing factors of quality, much of it is invisible to the students in the online arena. However, the interaction between the student and the instructor is not invisible. The creation of the relationship and the community of students with the faculty member in an online environment is critical to the pursuit of knowledge. It is also critical to student satisfaction.

How Does Walden University Evaluate Faculty?

Evaluation of faculty is critical to establishing a quality program. It is important to the program, the students and the faculty themselves to know how they are doing. Holmberg (1989) said there are two reasons for evaluation 1) to safeguard the highest possible education quality and 2) to assure resources are spent wisely. There are no unique problems regarding evaluation in the online area. If anything evaluation is easier as students easily adjust to responding to questions online and the ease of documentation of the interaction between the faculty and the students. Walden faculty are regularly evaluated. Students complete a program evaluation after their first quarter of the program. In each case they evaluate the services provided them by the recruitment, admissions, registration, orientation, and progress teams. In addition each course has a mid-quarter course evaluation and a final instructor evaluation. These evaluation tools are utilized in the faculty performance and re-contracting process. However, student data alone do not make up the evaluation process. In addition to the perspective and satisfaction of the students there is also the evaluation by the program director. In this case the program director is part of each course as an observer. Lastly, the instructor himself or herself writes a narrative summary and evaluation of their performance at the course conclusion. These three perspectives, student, teacher and administrator are used to fully evaluate the course related to both satisfaction and to quality outcomes.
How Does Walden University Empower?

The empowerment of all the participants is an important ethical aspect of quality in an online educational program. Because of the independence of all the participants in an online educational program it is important that they feel empowered. Students must be empowered to make their own decisions. Faculty must be empowered to adjust the course to follow the constructivist model, administrators must be empowered to intervene with students or faculty when appropriate, and support process teams must be empowered to meet the students needs.

Conclusion

It is clear that a quality assurance program is vital to the ongoing success and the fiscal requirements of online educational programming. It must be continuous and permeate all aspects of the delivery and content of the program. It must be evidenced by the leadership of the institution, the faculty, the curriculum, the materials, the delivery model and student services. An institution could create a model based only in quality of the classroom, but it will fall short in other critical areas of assuring success for students.

It is the tension between being a student centered institution and having integrity that can give administrators their greatest challenges. This model, in which the managerial, functional and ethical (Duning, et al. 1993) aspects of quality are explored through a series of questions is one way to develop a quality program. The ECTI program at Walden University is able to answer each of these questions for its program, the faculty, the delivery and the students. As the program continues to develop it is clear the commitment toward quality by all the involved constituencies is in place. The retention is high, the satisfaction is documented in the student responses and the faculty commitment is in place. Students currently are progressing through their program, their research projects and are able to find success at Walden University. Quality assures student success, faculty success and program success will only continue.

Bibliography


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