Benchmarking Quality in Online Degree Programs Status and Prospects

Michael A. Mariasingam, Ph.D.,
Research Associate
University of Wisconsin

Donald E. Hanna, Ph.D
Professor of Educational Communications
University of Wisconsin

The number of online degree programs offered by universities, both within the United States and in other countries around the globe, has expanded remarkably from the year 2000 to 2005. Recent research [Pond (2002), Twigg, (2001), Swail and Kampits (2001), Nielson (1997)] indicates that this rapid expansion has superceded our understanding of how to plan, organize, and evaluate these programs effectively. Currently available frameworks provide general guidelines for creating programs of high quality, but they are not specific enough to be of high value in comprehensively organizing and ensuring a quality online degree program. Hence, the development of a solid and comprehensive framework for benchmarking quality of online degree programs is critical to future program growth and expansion.

This discussion is organized around four core themes. First, the authors present the status of currently available quality assessment frameworks for assessing the quality of online degree programs. Second, emerging concepts for quality assessment are reviewed. Third, the authors propose a comprehensive and utilitarian program improvement model, and the model's core concepts, structure, and focus are discussed. Finally, areas for further research in quality improvement and assessment for online degree programs are outlined.

Current Status: The Need for a Review of Existing Quality Guidelines

Increased student demand for flexible education has created considerable interest among many private educational providers who want to capitalize on this emerging market of professionals wishing to maintain and update their skills in a rapidly changing economic and technological environment. With the rapid expansion of higher education generally, and distance education online degree programs in particular, concern for the educational quality of these programs has become an issue of paramount importance globally. Swail and Kampits (2001) observe, “Absent accountability, quality assurance , and evaluation , distance learning increasingly attracts educational providers attuned to marketability and profit” (p. 38). Past approaches to assessing quality based on guidelines have focused primarily on evaluating inputs to the educational process, such as facilities, quality of teaching and research staff, volumes in the library, the preparation and quality of incoming students. This approach for measuring and ensuring quality can no longer be sufficient in an environment that demands institutional accountability for what students learn rather than what the institution teaches. Swail and Kampits (2001) also observe, “Over the past three decades, accreditors (and the public) have supported the rapid rise of distance education with little attention to *new benchmarks* [emphasis added] for evaluation and

assessment" (p. 43). Many countries are implementing major new quality assurance processes and requirements that require documentation of learning outcomes, the student experience, institutional planning processes, and proof of institutional financial stability.

Establishing appropriate updated standards and benchmarks for evaluating the quality and impact of online degree programs is now essential. Recently several organizations have proposed new guidelines for assessing the quality of these programs, but the resulting frameworks are still inadequate and incomplete.

To establish the status of currently available quality assessment tools the authors reviewed a number of presently used quality assessment guidelines. Specifically, the authors examined these guidelines with the goal of assessing how well the set of guidelines incorporate the following criteria suggested by literature review as being critical to establishing quality:

- To what extent do the program's teaching/learning materials and processes?
- Foster collaborative learning?
- Facilitate formation of learning communities?
- Facilitate social integration?
- Facilitate career integration?
- Impart the skills necessary to transfer knowledge to job performance?
- How flexible is the program in enabling learners to pursue education anywhere, anytime, at any pace?
- How does the program prepare participants to become successful lifelong learners?
- How well does the program address societal educational needs?
- Are program costs examined comprehensively from the perspective of the learner, in terms of time, access, and dollars, as well as from the perspective of the institution on these measures?
- Are employer requirements concerning the learning outcomes of online programs specifically listed in appropriate situations and contexts and included as a criterion of overall program quality?
- To what extent are requirements of governments incorporated as a critical element of quality?
- Are relevant cross-cultural challenges, choice of language of instruction, and meeting international standards and requirements for accreditation considered a key element of quality online programs?
- Do criteria incorporate performance evaluation criteria appropriate to the goals and processes of online learning, rather than using simplistic comparisons with what happens in face-2-face

classrooms?

With respect to these specific criteria identified through literature review as critical elements of quality in online learning, the following guidelines were reviewed to determine whether or not, as a set, these criteria were explicitly stated and systematically addressed:

- *Guidelines for Distance Education* developed by the Higher Learning Commission of the North Central Association Commission on Institutions of Higher Education (2000)

- *Guidelines for Distance Learning Programs* developed by Commission on Higher Education, Middle States Association of Colleges and Schools (1997)

- *Guiding Principles for Distance Learning in a Learning Society* prepared by the American Council on Education (1996)

- *ADEC Guiding Principles for Distance Learning* by the American Distance Education Consortium (ADEC, 2002)

- Some principles of good practice for the virtual university (Johnstone & Krauth, 1996)

- *Best Practices For Electronically Offered Degree and Certificate Programs* drafted by the Western Cooperative for Educational Telecommunications (WCET) and developed by eight regional accrediting commissions (2002)

- *Principles of Good Practice for Distance Learning/Web-Based Courses* prepared by the Missouri Department of Higher Education (2000)

- *Quality on the Line: Benchmarks for Success in Internet-Based Distance Education* prepared by the Institute for Higher Education Policy (2000)

- *Elements of Quality: The Sloan-C Framework* by Moore (2002).

It is our assessment, while there are variations and differences of emphasis among the individual guidelines, that none of them individually systematically incorporate these criteria and offer benchmarks for their measurement. These limitations and weaknesses of existing guidelines indicate a definite need for developing more comprehensive quality assurance ***benchmarks*** **,** which would incorporate the above criteria and expectations, and would move from utilizing ***guidelines*** to establishing appropriate ***benchmarks*** for assessing the quality of online degree programs.

Emerging Conceptual Approaches to Assessing Quality in Online Programs

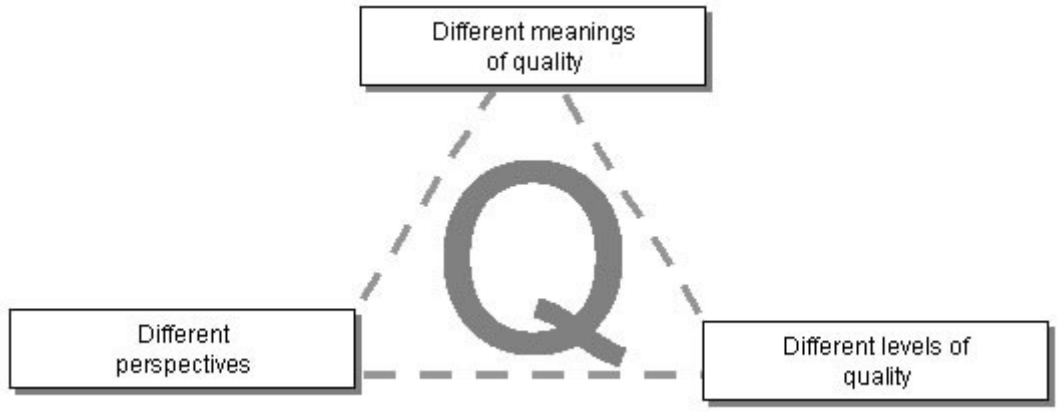
Quality, as is well known, lies in the eye of the beholder. There are, therefore, many different ways quality can be conceptualized. Quality also has multiple dimensions. Ehlers (2004) observes,

The question arises how such a complex concept as quality, can be conceptualised [*sic*] systematically. Three different dimensions can be distinguished here (cf. Ehlers 2002a, 2002b,

2003a): different meanings of quality, different quality perspectives and different levels of the educational process to which quality can apply

(Figure 1).

Figure. 1. Multiple dimensions of the quality concept in e-learning



Structure of Quality Framework

The degree or extent of quality assessed will depend on the structure and features of the framework used to assess quality. The structure and features of any framework used for measuring quality will depend on the concept of quality it is designed to measure. Therefore, it is critical to define first the concept of quality from multiple perspectives, at different levels of analysis, and with a view of quality that incorporates multiple measures.

The Institute for Higher Education Policy (IHEP), in its document *Quality On the Line: Benchmarks for Success in Internet-Based Distance Education (2000)* has organized its guidelines into seven groups: Institutional Support Benchmarks, Course Development Benchmarks, Teaching/Learning Benchmarks, Course Structure Benchmarks, Student Support Benchmarks, Faculty Support Benchmarks, and Evaluation and Assessment Benchmarks.

The American Distance Education Consortium (ADEC) has listed its distance education guidelines in its *ADEC Guiding Principles for Distance Learning (2003)* under four headings **:** Design for active and effective learning, Support the needs of learners, Develop and maintain the technological and human infrastructure, and Sustain administrative and organizational commitment.

The American Council on Education (AEC) has organized its quality assessment criteria for distance learning in its document *Distance Learning Evaluation Guide (2001)* under the following seven groups: Learning Design, Learning Objectives and Outcomes, Learning Materials, Technology, Learner Support, Organizational Commitment, Subject Matter/Content of Course (Module or Program).

Generally all these structural headings under which the guidelines have been organized are functional headings. In each of the above three approaches [of IHEP, ADEC, ACE] **,** additional

detail and explication of the three dimensions – of underlying purposes, range of required perspectives, and levels of assessment - for conceptualizing quality is required.

Purposes

In developing an appropriate quality benchmarking plan, one must address the purpose of evaluating program quality. Is the overall framework designed for comparative or competitive purposes, in order to provide some ranking of programs to the public, or is it for continuous improvement? The answer to this question will determine much about how the process of benchmarking quality is implemented, how open the process will be, and how readily program staff, students and others will be able to locate targets of improvement. The authors assert that efforts to use quality assurance to rank and even to fund programs will result in a skewed process that will affect integrity, openness, and objectivity, all of which are critical elements of any strategy for using assessment as a process of program improvement.

Multiple Perspectives and Stakeholders

A second major question concerns who should be involved in an assessment of quality of online degree programs. Current guidelines call for the perspectives of students, faculty and appropriate administrative personnel to be considered, but do not stress including employers, licensing agencies, and other stakeholders as major players in the benchmarking strategy. While this may not be a requirement for all programs, nevertheless most programs have external constituencies whose needs should be considered and represented. Higher education has become inextricably linked with economic development, career preparation and advancement, and it has also become a global concern and commodity. As an example from the UK , Roffe (1998) says,

" Higher education institutions (HEI) [in the UK] now operate in a global environment and compete for students and funds internationally, as well as in the UK , with the intention of maintaining or increasing their share of student numbers (p. 74). … The higher education system in the UK is increasingly dominated by the values of competition. Indeed, with the growing mobility of students this is an international as well as a national phenomenon. In this environment students are becoming customers as well as consumers, expected to pay a growing share of the costs of their education. This leads to competitive forces that generate different programmes [*sic*] for different student groups" (p. 81).

This growing competitive environment is a global phenomenon. The

Department of Education, Science, and Training, Australian Government (2004) says, in its document *The Australian Higher Education Quality Education Framework,*

The world's workforce is becoming increasingly geographically fluid across national, regional and international borders due to economic globalisation [*sic*] and the development of advanced communications and information technologies. In this context, knowledge has emerged as an economic commodity which has in turn placed pressure on existing national systems to ensure they are placed competitively in the international marketplace.

With respect to this additional role of higher education, Pond (2002) states:

Certainly, most of us would not be comfortable assuming that an educational product is a quality

product simply because it is valued in the marketplace. Nonetheless, we would be foolish to ignore the fact that ultimately, because of the very nature of elearning, learners (or customers) are able to choose from a multitude of educational offerings regardless of what we or anyone else believes about the quality or legitimacy of such products. We would also be naïve not to recognize that education has become a commodity. It can be bought, sold, and transferred just like any other commodity. And educational providers, whether not-for-profit, public, private, or proprietary, are all ultimately bottom-line driven. If an institution's products do not have market value the institution will not have a market. …Quality assurance in the 21 st century, then, may very likely have more of a *business orientation* [emphasis added] than a traditional educational one—not because "business is better," but because market forces may dictate how educational "products" are delivered and evaluated. (New Paradigms for Accreditation and Quality Assurance section, para. 3).

In such a business oriented quality assurance approach, Schweiger (1996) notes " *A product tends to become a quality product when it is of value to the customer. Customer satisfaction is the one thing that seems to be a given in every approach to defining quality* " (p. 11, emphasis in the original). This is more so in the case of online degree programs, where students increasingly are choosing from programs available globally. Therefore, it is essential that we broaden our concepts of stakeholders to recognize both the related employment consequences of quality, and the international dimensions of stakeholders that are increasingly important.

Levels of Quality

Another important element of successful strategies for benchmarking quality in online degree programs is a recognition that quality can be conceptualized and measured at different levels. Quality benchmarks can and should be measured at the institutional level, the program level, and the course level. Quality issues and considerations at these three levels are interrelated and there will be some overlap of them among the three levels. However, many quality assessment benchmarking strategies focus only on one or sometimes two of these elements, and the results are therefore incomplete and do not enable the program to recognize all of the elements that should be addressed for comprehensive program improvement. All of these levels of analysis must be addressed simultaneously for maximum opportunity for program improvement.

Structure of the Quality Framework - Focus of Quality Assessment

Schweiger (1996) observes " The achievement of quality can be managed and the quality itself be credibly measured only when it is clear for what purpose the product or service is to be fit for and whose quality interests are to be served" (p. 11). The organizational structure in which the quality criteria can be arranged clearly can take different forms. Different organizations and different programs require specialized and unique criteria that can and should be selected only after careful review of the program's purposes.

Nevertheless, the authors argue that a more comprehensive approach is required for successfully benchmarking of online degree programs at the institutional, program, and course level, incorporating the goal of program improvement as a key purpose of benchmarking, and recognizing the importance of multiple stakeholders in the assessment process. We have proposed the following table (Table 1) that summarizes such an approach, and that strengthens current quality assessment approaches elaborated in this article.

Institutional Requirements	*Learner Requirements*	*Faculty Requirements*
Mission • Quality assurance and quality enhancement as part of mission of the institution. • Use of technology to enhance quality is included in the mission. ***Continuous Quality Improvement Measures*** • Effective system of institutional self-assessment of programs for quality is in place. • Self-assessment of programs for continuous quality improvement is in place ***Access*** • Providing wider access to education through the use of technology to those who have no or limited access to education is included in the mission. ***Evaluation of Program Effectiveness*** • Ongoing evaluation of program effectiveness is an essential part of the	***Program Suitability*** • Before starting an online program students are advised on the suitability of the programs to their educational objectives, educational qualifications, cost expectations, and motivational and commitment requirements. ***Learning Effectiveness*** • Course design is managed by teams comprised of faculty, technical experts, and instructional designers; and instructional materials are reviewed periodically to ensure they meet program standards. • Academic integration through learner-content interaction, learner-instructor interaction, and learner-learner interaction is included as an essential requirement for achieving learning effectiveness. • Social integration by designing courses to create a conducive social climate is included as an essential requirement for learning effectiveness. ***Cost Effectiveness*** • Cost effectiveness measures are taken in designing and delivering online programs by giving serious consideration to media selection, use of time, fiscal, technical, human resources, and other relevant measures **.** ***Flexibility for Unique and Personalized Educational Experience*** • Courses and programs are designed to provide flexibility to learners in learning approaches, and other personal and social factors to provide them a learning experience which is as unique and personalized as possible.	***Faculty Incentives*** • Institutional environment for online teaching is an enabling environment that encourages innbvative practices and enhances and sustains motivation for development of distance learning programs. • There are institutional incentives and rewards such as monetary awards and tenure policies to motivate reluctant faculty in innovative practices for development and effective teaching of online programs . ***Teaching Support*** • Faculty members are assisted in the transition from classroom teaching to online instruction through various forms of ongoing training and assistance. • To deal with issues arising from student use of

continuous quality improvement process and is done to improve program effectiveness. ***Student Satisfaction*** • A Course Experience Survey to obtain information on student perceptions of their experiences at university for the purposes of quality improvement is done. ***Post Graduation Employment Success Assessment*** • A Graduate Destination Survey is to be completed by graduates six months after completion of their course to collect information on student career placement.	***Cultural Contextualization*** • Programs are designed with flexibility in content and delivery to remain relevant and adequate for the varying requirements of learners in different social and cultural settings. ***Institutional Support for Learne* rs** • A well-planned, coordinated centralized system very flexible in meeting the multiple needs of programs, faculty, and students provides support for building and maintaining the distance education infrastructure. • Questions directed to student service personnel are answered promptly and accurately, with a structured and effective system in place to address student complaints and student complaints are addressed promptly and the system is monitored regularly for effective functioning. • There is an effective library services system that includes the following: A virtual library; arrangements with local libraries for library resources; hands-on training and information to aid learners in securing material through electronic databases, interlibrary loans, government archives, news services, and other sources; and involvement of library administration and other personnel in the detailed analysis of planning, developing, and evaluating the distance learning program from the earliest stages onward. • Comprehensive technology plan that includes a plan for a reliable failsafe technology support system, policies that give high priorities for a user-friendly system, and continuous multiple forms of technology support to students throughout the program is in place.	electronically accessed data, faculty members are provided with resources. ***Technology Support*** • Technical assistance in course development and course management is available to faculty and such assistance is appropriate to motivate them to use it.

`Employer Requirements	*Society Requirements*	*Government Requirements*
Performance Objectives • The learning objectives and learning outcomes of the online program clearly indicate the program has been designed and developed to meet identified needs of the employers in terms of the graduates' knowledge, skills and competency(ies) for job performance, and ability to transfer the learning to job performance. • The intended objective of the online program is to meet identified needs of employers in terms of the continuing professional development of their employees and the program is designed to meet that objective.	***Lifelong Learning*** • The online program has been designed to instill in the learners the ability and skills for lifelong learning. ***Relevance to Society Needs*** • The online program includes general education that prepares graduates for good citizenship with social responsibility, civic participation, and social and cultural understanding. ***Contribution to Human Resources*** • Contributing to the development of human resource needed to meet the societal requirements is included as an objective of the online program.	***Ethical Requirements*** • In presenting the information about the online program to the public the institution has adhered to standards that go beyond the minimum required legal standards at the national and international level. • Through its publicity and marketing strategies used in presenting the information about the online program to the public the institution has made efforts to reach those who have the most need for the online program. ***Accreditation Requirements*** • The institution has met accreditation requirements for the online program at international level. ***Legal and Statutory Requirements*** • In the delivery of the online programs to facilitate equal access by learners with disability, the institution has taken appropriate steps to meet the requirements of the disability act and other legal requirements set by the government.

Table 1. Quality Criteria and Benchmarks for Online Degree Programs – Summary

An example of areas appropriate for the development of benchmarks of quality at the institutional level (Mariasingam 2005) would include criteria such as level of organizational commitment, financial levels of support for online degree programs, and whether or not the institution has in place planning processes that incorporate complex and challenging issues the institution faces in the external environment. At the program level performance measures would focus on all those elements that together are critical to successful student learning, including inputs, processes, and support requirements. At the course level, important performance measures include standards for technology, instructional design, and learner interactions of many types and purposes. As with the institutional and program level, benchmarks would include assessment of inputs, processes, and performance outcomes. As with any comprehensive assessment process, individual benchmarks are interrelated and complex in their implementation and assessment.

Future Research

Research in quality in distance education in general and eLearning in particular is in its infant state. There are a number of areas in which extensive research in quality in eLearning is needed. The most important of all is the need to establish a systematic process for developing and delivering high quality online programs. This quality assurance process – the process to ensure that the distance education programs delivered are of high quality - requires some very specific steps to be taken. While detailed discussion of these steps is beyond the scope of this article, the authors suggest five concrete steps that can be taken in implementing an effective quality assurance process. These steps are:

Step 1: Define the quality criteria and benchmarks for the program. These criteria and benchmarks have to be defined such that the benchmarks are comprehensive to include multiple perspectives – perspectives of all stakeholders.

Step 2: Define specific actions to take in developing and offering the program to ensure quality. These actions must be defined such that they ensure that the program would meet the quality criteria and benchmarks defined in Step 1.

Step 3: Put in place a monitoring system and a review system for periodic review to ensure that the actions defined to be taken in Step 2 are implemented and they are functioning as intended.

Step 4: Have in place an institutional system that includes a self-assessment process to determine that the quality assurance steps taken in 1 - 3 are yielding the intended learning outcomes.

Step 5: Include a process to take appropriate actions to correct any deficiencies that the

self-assessment process might reveal.

Development of these systems and processes from the benchmarks would require considerable research and would be an important area for future research.

Conclusion

This article has reviewed existing guidelines used for assessing the quality of online degree programs. We have stated the case for the development of more comprehensive set of guidelines, criteria, and benchmarks that incorporate the need for additional perspectives, assessment at multiple levels of analysis, and a view of quality that stems from the primary purpose of assessment as continuous program improvement. We argue that this more comprehensive approach to quality assessment is critical given the recent extraordinary growth in online degree programs and the growing concern for quality, expressed globally by governments, employers, students, and faculties, among many stakeholders. The paper presents a more comprehensive set of benchmarks that can provide a foundation for institutional reviews and assessments of quality in online degree programs. This proposed framework details quality performance benchmarks, which we argue provide a necessary next step in assessing, improving, and advancing the quality of online degree programs.

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About the Authors:

Dr. Michael A Mariasingam is a Research Associate in the College of Engineering at the University of Wisconsin - Madison . He has been teaching electronic engineering for many years in different countries before he joined the Continuing and Vocational Education (CAVE) Program at UW-Madison as a graduate student. His PhD is in Continuing and Vocational Education with a focus in distance education and a dissertation on Quality Criteria and Benchmarks for Online Degree Programs.

Dr. Mariasingam was involved in developing new programs and establishing new faculties of engineering in Singapore , Malaysia , India , and Zimbabwe . He was Chairman, Department of Electronic Engineering (1996-97) and Acting Dean, Faculty of Engineering at the National University of Science and Technology , Zimbabwe . He was also Coordinator of the Africa Virtual University Project (1997-98) – a World Bank Project to set up a virtual university for Africa to offer engineering and management programs. He was founding Chairman, Electronic Science and Technology Program (1976-79) at Universiti Sains Malaysia , Malaysia .

Dr. Mariasingam 's research interests are quality in distance education, technology and education, reforms and innovation in engineering education, and alternative approaches to the delivery of programs. He has presented papers on engineering education in international conferences in many countries (Sri Lanka , France , Australia , Sweden , Poland , Denmark , Taiwan , Botswana , and Zimbabwe .) The focus of the papers was on reforms and innovation in engineering education, alternative delivery approaches and alternative approaches to financing engineering education.

He received his Bachelor of Engineering degree from the University of Madras in India , Master's degree in electrical engineering from the University of Aston in England (1970) and Master's and PhD degrees in Continuing and Vocational Education from the University of Wisconsin - Madison (2002, 2005).

Dr. Donald E. Hanna is Professor of Educational Communications, University of Wisconsin-Extension. He has been an administrator and teacher at four U.S. land-grant universities, and has participated in and helped to lead major institutional change efforts related to outreach, continuing education, technology, and distance learning at three of these universities.

Dr. Hanna has written numerous articles, and is the principal author of Higher Education in an Era of Digital Competition: Choices and Challenges, published by Atwood Publishing in 2000, an analysis of emerging organizational models and changing strategies of universities and colleges, with particular focus upon the important effects of new learning technologies such as the web and the internet. He is co-author and editor of three other recent books: 147 Practical Tips for Teaching Online: Essentials of Web-based Education (2000), and Leadership for 21 st Century Learning: Global Perspectives from International Innovators, with Colin Latchem of Australia (2001) and Bridging the Gap: Leadership, Technology, and Organizational Change for Deans and Department Chairs (2003). He is frequently invited as a keynote speaker to speak about technology and organizational change in higher education at national and international professional conferences. He has consulted with numerous universities and organizations in the U.S. and internationally, and has received Fulbright grants for teaching and research in Thailand , Viet Nam , and Latvia .

Dr. Hanna served as Chancellor of the University of Wisconsin-Extension from 1993-1997 and previously was Associate Vice-Provost for Extended University Services at Washington State University and Professor of Adult and Continuing Education, where he served from 1983-1993. He also was Assistant Professor and Head of the Division of Extramural Courses at the University of Illinois at Urbana-Champaign from 1979-1983. Dr. Hanna has received a number of awards for creative programming and leadership, including a Kellogg National Fellowship to pursue the study of telecommunications policy and applications of telecommunications that benefit developing countries and a fellowship with Northwestern University 's Annenberg Communications Policy Program in Washington , D.C. He has served for more than 15 years as a consultant-evaluator for two regional accrediting commissions in the United States , and has participated in numerous qualitative institutional reviews.

He received his A.B. degree in anthropology and history from the University of Kansas , and his Ph.D. in adult and continuing education from Michigan State University in 1978.
