#### International Issues

# Measuring Quality in Internet-Based Higher Education: Benchmarks for Success

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In the 10 years since the software for the World Wide Web was developed by Tim Berners-Lee in Switzerland, educational institutions, research centers, libraries, government agencies, commercial enterprises, advocacy groups, and a multitude of individuals have rushed to connect to the Internet. Indeed, not since the printing press was invented by Johannes Gutenberg in the 15th century has an "invention" generated such potential to dramatically change how people communicate and interact with one another.

The extraordinary growth of technology-mediated distance learning in higher education has prompted several different organizations to develop principles, guidelines, or benchmarks to ensure quality distance education. The organizations include the American Council on Education, the Global Alliance for Transnational Education, the National Education Association, and the Southern Regional Electronic Campus, among others. The quality assurance benchmarks promoted by these organizations are designed to apply to a wide variety of institutional contexts and consist of fairly broad statements. The strategies address such topics as course development, faculty training, student services, learning resources, infrastructure, and outcomes assessment.

Benchmarks for all types of distance learning have been in existence in various forms for a number of years. The question that has arisen is whether they are applicable to Internet-based distance education. Two organizations-the National Education Association, the largest professional association of higher education faculty in the United States, and Blackboard, Inc., a widely used platform provider for on-line distance education-have explored these issues. The two organizations jointly commissioned the Institute for Higher Education Policy to examine the benchmarks by studying active distance learning programs at several institutions and to attempt to validate published benchmarks, with specific attention to Internet-based distance education. The goal was to ascertain the degree to which the benchmarks are actually incorporated in the policies, procedures, and practices of colleges and universities that are distance education leaders. In addition, the study sought to determine how important the benchmarks are to faculty, administrators, and students.

### The Case Study

A comprehensive literature search yielded a total of 45 benchmarks recommended by other organizations and groups, as well as those suggested in various articles and publications.

U.S. institutions were then identified according to the following criteria. The institutions must be experienced in distance education, recognized as leaders in Internet-based distance education, regionally accredited, and offering more than one degree program via on-line distance learning. To capture a broad spectrum of higher education institutions, the study would include a community college, a comprehensive institution, a research institution, and a virtual institution. Of the several colleges and universities that fit the requirements, the following six institutions agreed to participate in the study: Brevard Community College in Florida, Regents College in New York, the University of Illinois at Urbana-Champaign, the University of Maryland University College, Utah State University, and Weber State University in Utah. Site visits to these institutions included interviews with faculty, administrators, and students. A survey was undertaken to rate the presence and importance of the original group of 45 benchmarks and their impact on academic quality.

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### Findings

The study showed that, for the most part, the benchmarks for quality Internet-based distance education were considered important and that institutions tried to incorporate them into their policies and procedures. At the same time, several benchmarks did not enjoy unanimous support and, in some instances, were not considered mandatory for ensuring quality in distance education.

The final outcome of the study was a list of 24 benchmarks considered essential to ensure quality in Internet-based distance education.

#### Institutional Support Benchmarks

• A documented technology plan that includes electronic security measures (i.e., password protection, encryption, back-up systems) is in place and operational to ensure both quality standards and the integrity and validity of information.

• The reliability of the technology delivery system is as failsafe as possible.

• A centralized system provides support for building and maintaining the distance education infrastructure. *Course Development Benchmarks* 

• Guidelines regarding minimum standards are used for course development, design, and delivery, while learning outcomes—not the availability of existing technology—determine the technology being used to deliver course content.

• Instructional materials are reviewed periodically to ensure they meet program standards.

• Courses are designed to require students to engage in analysis, synthesis, and evaluation as part of their course and program requirements.

Teaching and Learning Benchmarks

• Student interaction with faculty and other students is an essential characteristic and is facilitated through a variety of ways, including voice mail or e-mail.

• Feedback to student assignments and questions is constructive and provided in a timely manner.

• Students are instructed in the proper methods of effective research, including assessment of the validity of resources.

Course Structure Benchmarks

• Before starting an on-line program, students are advised about the program to determine if they possess the self-motivation and commitment to learn at a distance and if they have access to the minimal technology required by the course design.

• Students are provided with supplemental course information that outlines course objectives, concepts, and ideas; learning outcomes for each course are summarized in a clearly written, straightforward statement.

• Students have access to sufficient library resources that may include a "virtual library" accessible through the Web.

• Faculty and students agree upon expectations regarding times for student assignment completion and faculty response. *Student Support Benchmarks* 

• Students receive information about programs, including admission requirements, tuition and fees, books and supplies, technical and proctoring requirements, and student support services.

• Students are provided with hands-on training and information to aid them in securing material through electronic databases, interlibrary loans, government archives, news services, and other sources.

• Throughout the duration of the course or program, students have access to technical assistance, including detailed instructions regarding the electronic media used, practice sessions prior to the beginning of the course, and convenient access to technical support staff.

• Questions directed to student service personnel are answered accurately and quickly, with a structured system in place to address student complaints. *Faculty Support Benchmarks* 

• Technical assistance in course development is available to faculty, who are encouraged to use it.

• Faculty members are assisted in the transition from classroom teaching to on-line instruction and are assessed during the process.

• Instructor training and assistance, including peer mentoring, continue through the progression of the on-line course.

• Faculty members are provided with written resources to deal with issues arising from student use of electronically accessed data.

Evaluation and Assessment Benchmarks

• The program's educational effectiveness and teaching and learning process are assessed through an evaluation process that uses several methods and applies specific standards.

• Data on enrollment, costs, and successful and innovative application of technology are used to evaluate program effectiveness.

• Intended learning outcomes are reviewed regularly to ensure clarity, utility, and appropriateness.

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### Conclusion

The 24 benchmarks that made the final list were considered mandatory for quality Internet-based distance education. Stated differently, the absence of the benchmark would be deleterious to quality. The purpose of this case study was to assist policymakers—such as college and university presidents and chief academic officers, state coordinating boards, accrediting bodies, state legislatures, and governors' offices—as well as faculty and students, make reasonable judgments with regard to quality Internet-based distance education. We are confident that policymakers around the globe can use this list to address the issue of quality without placing unnecessary restrictions on institutions of higher education.

Author's Note: This description of the case study is adapted from the full report, *Quality On the Line: Benchmarks for Success in Internet-based Distance Education*, which can be found on the institute's web site at <www.ihep.com>.