

STANDARDS, ACCREDITATION, BENCHMARKS, AND GUIDELINES IN DISTANCE EDUCATION

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Standards are the results of concerted efforts to improve the quality of education found in distance education. Legal and ethical standards are needed to ensure a positive educational environment. Participants from different cultural, physical, economical, and intellectual backgrounds should have equal access to all the positive aspects of distance education. Standards support the consistent ways to maintain high quality distance education via collaborations among different regional institutions. They ensure the efficiency and usability of learning by reducing the differences between learning experiences of different regions. The standards allow all stakeholders access and adapt learning experiences based on their needs and learning goals.

INTRODUCTION

This article reviews the standards, accreditation, benchmarks, and guidelines in distance education. Technology is changing everything around us at unprecedented speeds. We are currently in a new culture, aptly named the digital age. These massive technological advancements have brought about significant evolutions in the mode of instruction. One of benefits from this rapidly evolving approach to education is the increased access to distance education. The needs of modern society have placed new demands on distance education. It is now, more than ever, a necessity in the ever evolving world of education.

Distance education has also produced and promoted favorable learning environments for learners who have limitations of time and space (Ciavarelli, 2003). The same is true for individuals in living remote areas who do not have convenient access to institutions of higher education (Leh, 2002).

Postsecondary institutions of higher education have responded to the instructional opportunities afforded by the World Wide Web and the Internet through the offering of courses and online degree programs (Guri-Rosenblit, 1999). Additionally, there has been a movement to establish new universities that primarily focus on distance education utilizing the Internet as a primary source for the delivery of instruction (Tait, 2003). Leh (2002) stated, "It is estimated that in 2002 about 85% of two- and four-year colleges would offer distance education programs and that by the year 2006 enrollment in distance education learning programs will increase by 1.5 million students" (p. 88).

This growth has been largely due to the ease of accessing instruction offered over the Internet and in combination with other forms of distance education (Belanger & Jordan, 2000). Students who previously were not able to conveniently participate in higher education through traditional campus-based environ-

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ments are now able to enroll and complete coursework or degree programs without relocating or changing their lifestyles (Rossman, 1992).

The number of postsecondary educational institutions implementing distance education continues to increase. With this increase, concerns regarding the quality of distance education have arisen. A major concern is the need for evaluation strategies which assess the effectiveness of the online courses (Childress, Heaton, & Pauley, 2002).

Program evaluation and processes are needed to ensure high quality instruction given the growth in distance education and the varied circumstances under which online courses and degrees of distance education are offered. Standards, guidelines, and benchmarks are the criteria used to develop distance education programs.

STANDARDS

Marshall (2004) stated that "standards represent a significant investment of resources and are consequently driven by a desire to solve specific problems in particular context that are relevant to those providing the resources" (p. 599). Dean (1990) argued that standards were to play a role as "the performance expectations within the profession" (p. 2). Dean believed that standards were to facilitate the productivity of performance by clarifying and explaining the goals and main accomplishments.

Many educators, educational institutions, and governments have increased their scrutiny regarding distance education standards. Improved standards are the result of the effort to solve the specific problems (Dean, 1990; Marshall, 2004). A way that guarantees the maintenance of the quality of distance education pedagogic approaches is the development of e-learning standards (Oliver & Liber, 2003).

The leading international distance education institutions are developing new standards for distance education because their standards

support the need of distance education innovation (Jones, 2002; Marshall, 2004).

Two benefits of standards are summarized through the literature review. First, standards are created, in part, to reduce the costs of content resource discovery and to develop and maintain the quality of content. These standards represent rigid guidance of distance education implementation regarding the quality of instructional content and need. Therefore, the implemented standards yielded quality distance learning experiences. These experiences are so good that some learning resources are reused for several years following their initial implementation. It should be noted that online courses has to be updated within three or four years of their amendments.

For example, resources consistently meeting the prescribed standards have provided a large extent of available online learning material, enough so, that users choose learning resources which meet their instructional needs without having to waste time or incur increased financial expenditure (Center for Educational Technology Interoperability Standards, 2004; Jones, 2002; Marshall, 2004; Olivier & Liber, 2003). Second, standards guarantee greater efficiency through interoperability between systems. Individual distance education resources can be easily accessed from learning system to learning system.

Universal standards also reduce the difference between the learning experiences in varying educational systems. These differences can be minimized so much that different educational bodies can collaborate their distance education material in order to create a higher quality program while reducing the time and money required in developing and maintaining distance education resources (Dobbs, 2000; Jones; Olivier & Liber).

ACCREDITATION

With increasing attention on distance education, the six U.S. accrediting bodies have completed a set of recommendations that evaluate

and develop distance education programs in America (Carnevale, 2001; McDonald, 2002). Lezberg (1998) defines accreditation as “a status granted to educational institutions found to meet or exceed stated criteria of institutional quality” (p. 27).

Regional commissions have defined their distance education standards through a series of guidelines, recommendations, and sets of commitments.

Because online education is a relatively new approach, most regional commissions emphasize standards that are broad and flexible in order to learn and adapt to the unforeseeable conditions and expectations placed on this form of distance education. Each regional institution also has different online learning experiences, needs, instructional traditions, and values and principles.

However, accreditation brings consistency and stability along with improved learning conditions through collaboration among commissions; “commitment to cooperation among the eight regional commissions directed toward a consistent approach to the evaluation of distance education informed through collaboration with others and commitment to supporting good practice among institutions” (Council of Regional Accrediting Commissions, 2000, p. 1).

Although the standards or commitments are different among regional organizations based on their distance education experiences, each commission grants accreditation to an institution when the institution has (a) distinctly stated postsecondary educational goals, (b) collective and systematic learning resources to implement distance education experience, and (c) the quality distance learning to gain the expected learning outcomes (Lezberg, 1998).

Lezberg noted that the regional accrediting associations were private and not seeking profits. The federal government also identified these associations as reliable and professional judges of quality learning institutions. Lezberg also stated that the regional accrediting agencies’ main responsibility was to control the quality of education. In order to fulfill this

responsibility, the regional accrediting agencies created three general requirements for distance education. Distance education:

- is assumed to be a part of the educational system curriculum;
- pursues the institution’s academic responsibilities and has been standardized based on the general accreditation standards already in place; and
- is to be evaluated for accreditation in the same manner as all other components of the learning experience.

The seven regional accrediting commissions are:

1. Commission on Higher Education, Middle States Association of Colleges and Schools;
2. Commission on Institutions of Higher Education, New England Association of Schools and Colleges;
3. Commission on Institutions of Higher Education, North Central Association of Colleges and Schools;
4. Commission on Colleges, The Northwest Association of Schools and Colleges;
5. Commission on Colleges, Southern Association of Colleges and Schools;
6. Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges; and
7. Accrediting Commission for Senior Colleges, Western Association of Schools and Colleges.

The standards of the regional accrediting associations are to be comprehensive. Similar standards of quality are to be fulfilled throughout the different regions, although the specific comments of the regional standards happen to be dissimilar (Council of Regional Accrediting Commissions, 2000).

BENCHMARKS AND GUIDELINES

In response to attention to the quality of distance education, higher education organizations developed guidelines for distance

education. Most are related across and alike in terms of facilitating the best practice, performance, and implementations as well as designing instructional strategies in order to ensure the quality. Therefore, the guideline represents integral comments on what is thought highly of as prevalent best learning practice. The guidelines are intended to provide online learning institutions with a whole source to guide their distance education plans and instructional experiences. Therefore, the guidelines play a role as the self-assessment framework for distance education programs. Quite a few researchers reported that technology was productive and had gains in distance education experiences. Distance education administrators and faculties believe that a systematic device should be developed in order to facilitate the effective distance education.

A significant amount of research focuses on integrating new experimental and pedagogical models. The researchers studied how to (a) build the effective collaborative learning community, (b) evaluate the learning programs, (c) develop distance learning curriculum as well as instructional delivery methods, and (d) define distance learning participants' roles. In response to those efforts to yield the productive pedagogical gains and regional accrediting commissions require their accredited institutions to develop their own practical guideline as the framework. The guidelines should be developed based on their own distance education experiences and needs. They are the promulgations of their instructional implementations to ensure the quality distance learning because they are the written list of carrying out the instructional procedures.

The guidelines are also meant to assess and evaluate their own distance education experiences (Dasher-Alston & Patton, 1998; Lezberg, 1998; Western Cooperative for Educational Telecommunications, 2000). Accrediting commissions argue that through the guidelines the accredited institutions should clearly show their sincere intentions:

- To develop the institutions' academic processes of implementing effective distance learning. There should be clearly defined institution's educational mission, learning goals, and objectives. Curriculum development including instructional tools, learning resources, and the appropriate use of technology. The instructional delivery medium should be demonstrated to achieve the expected end results through the learning experience.
- To professionally assist the learner and faculty with easy access to learning resources. The resources are meant to stimulate learners' intellectual curiosity and support the instructor.
- To provide staff development opportunities through which the faculty will be efficient in managing the instructional technology.
- To assess the learner outcomes and evaluate the effectiveness of the online learning products and courses.

Some higher educational institutions developed guidelines for distance education practices. The guidelines are the outcome of the need of implementing the best learning experience and adapting effective instructional methods in order to ensure the quality of distance education. Therefore, they are similar across the accredited organizations in different regions (Dasher-Alston & Patton, 1998). The Western Cooperative for Educational Telecommunications (WCET) published, *Best Practices for Electronically Offered Degree and Certificate Programs*, or *Guidelines for the Evaluation of Electronically Offered Degree and Certificate Programs in 2000* (Carnevale, 2001). The eight regional accreditation commissions developed them.

The best practices are regarded as the essentials that are the mirror of the pedagogical quality considered worthwhile in the contemporary, digital age considering the region's educational experience. They are to be increased by the regional commissions' mem-

ber accredited institutions. Therefore, they are considered a product moving in improvement. The goals of best practices are to assist the accredited institutions—as the criteria—in developing the online learning curriculum including instructional strategies, learning materials, and selecting the appropriate learning resources and technologies. In addition, best practices plays a major role as the framework for the evaluation of the accredited institutions' distance education programs (WCET, 2000). Therefore, best practice stands for the primary pedagogical value across the regional commissions. WCET said that the values were:

- The collaborative learning community; the best educational experiences are to be yielded when the instructional activities are built through the qualified educators cooperative involvements in designing, deploying and facilitating the learning activities.
- The learning experience filled with active interactions.
- The systematically organized, integral instructional programs as the outcome of coherent curricula; the program should specify the learning outcomes.
- The capability to provide the learning resources as well as students' academic needs in pursuing learners' achievement.
- Self-assessments and evaluations of their own programs with the specific learning emphases.

WECT (2000) also argued that best practices had five dimensions, each of which was a particular and comprehensive element of distance education. They are institutional context and comment, curriculum and instruction, faculty support, student support, and evaluation and assessment:

- Institutional Context and Commitment: Electronically offered programs both support and extend the roles of educa-

tional institutions. Increasingly they are integral to academic organization, with growing implications for institutional infrastructure (p. 2).

- Curriculum and Instruction: Methods change, but standards of quality endure. The important issues are not technical but curriculum-driven and pedagogical. The big decisions are made by qualified faculty and focus on learning outcomes for an increasingly diverse student population (p. 4).
- Faculty Support: Faculty roles are becoming increasingly diverse and reorganized. For example, the same person may not perform both the tasks of course development and direct instruction to students. Regardless of who performs which of these tasks, important issues are involved (p. 8).
- Student Support: College and universities have learned that the twenty-first century student is different, both demographically and geographically, from students of previous generations. These differences affect everything from admissions policy to library services. Reaching these students, and serving them appropriately, are major challenges to today's institutions (p. 9).
- Evaluation and Assessment: Both the assessment of student achievement and evaluation of the overall program take on added importance as new techniques evolve. For example, in asynchronous programs the element of seat time is essentially removed from the equation. For these reasons, the institution conducts sustained, evidence-based and participatory inquiry as to whether distance learning programs are achieving objectives. The results of such inquiry are used to guide curriculum design and delivery, pedagogy, and educational processes, and may affect future policy and budgets perhaps have implications for the institutions' roles and mission (p. 12).

The National Education Association (NEA) and Blackboard Inc. validated the current benchmarks to examine whether they are essential and necessary to maintain the quality online through the case study. The 24 benchmarks are regarded as the essential within seven categories. They are (a) institutional support benchmarks, (b) course development benchmarks, (c) teaching/learning benchmarks, (d) course structure benchmarks, (e) student support benchmarks, (f) faculty support benchmarks, and (g) evaluation and assessment benchmarks.

Appendix A contains the 24 benchmarks. The first category, institutional support benchmarks deals with technology as the medium of delivery, infrastructure and its security matters. The second category, course development benchmarks, deals with (a) course development, (b) instruction delivery and the technology appropriate to learning outcomes, (c) instructional materials, (d) student involvement as the self-director regarding analysis, and (e) synthesis and evaluation. The third category, teaching/learning benchmarks, deals with students' interaction, feedback, and the appropriateness of resources. The fourth category, course structure benchmarks, deals with (a) advice on self-motivation, (b) access to the minimal technology, (c) the outlines of course objectives, (d) concepts, (e) ideas, (f) library resources, (g) the expected times for student assignment completion, and (h) faculty response. The fifth category, student support benchmarks, dealt with information about programs and hands-on training assistance in learning resources. The sixth category, faculty support benchmarks deals with assistance in technology and transition from traditional instruction to online teaching. The seventh category, evaluation and assessment benchmarks, deals with the evaluation of learning outcomes and program effectiveness (The Institute for Higher Education Policy, 2000). The *Seven Principles of Good Practice* were developed by Chickering and Zelda, and first published in 1987 (Chickering & Ehrmann, 1997). The seven principles include:

- Good practice encourages contacts between students and faculty.
- Good practice develops reciprocity and cooperation among students.
- Good practice uses active learning techniques.
- Good practice gives prompt feedback.
- Good practice emphasizes time on task.
- Good practice communicates high expectations.
- Good practice respects diverse talents and ways of learning.

Guiding Principles for Distance Learning and Teaching was published in 1999 by American Distance Education Consortium (ADEC, 1999) and they were revised to four categories with 24 principles (American Distance Education Consortium, 2002). ADEC argues that online learning has the quality of (a) facilitating constructive communications, (b) learner centered, (c) directed learning systems, (d) interchanged learning and teaching experience, (e) collaborative knowledge building community, and (f) authentic learning (American Distance Education Consortium, 1999). ADEC believes the principles are the most effective strategies in order to ensure the quality of online learning experiences. ADEC guiding principles for distance learning are contained in Appendix B and C. The outlines are:

- The learning experience must have a clear purpose with tightly focused outcomes and objectives.
- The learner is actively engaged.
- The learning environment makes appropriate use of a variety of media.
- Learning environments must include problem-based as well as knowledge-based learning.
- Learning experiences should support interaction and the development of communities of interest.
- The practice of distance learning contributes to the larger social mission of

education and training in a democratic society (pp.1-2).

The four categories included (a) design for active and effective learning, (b) support the needs of learners, (c) develop and maintain the technological and human infrastructure, and (d) sustain administrative and organizational commitment” (American Distance Education Consortium, 2002, p. 1).

Based on the published guidelines before 1999, the University of Illinois faculty seminar team from sixteen different affiliations suggested six questions assumed to be critical to evaluate online education. They included:

- Is the teaching style innovative?
- Is learning competence equal or superior to that of a traditional classroom?
- Are students engaged in the material?
- Is there interaction between professors and their students, and between the students themselves?
- Is access to technical support readily available? and
- For online programs that are more extensive, such as entire degree programs, are the signs of academic maturity present? (The University of Illinois faculty seminar team, 1999, p. 39).

Ragan (2000) said that an emerging set of guiding principles and practices reflected the assembled thoughts of faculty from Penn State, Lincoln, and Cheyney universities. The set is meant to evaluate the technology integration into the learning practice and the instructional methodologies. The set includes three main and two supplementary categories, which represent that the most important goal is to enhance quality learning. Ragan believed technology and learner support categories were supportive of the goal of quality learning and the major components of the educational events were “learning goals and content presentation, interactions, and assessment and measurement” (p. 4). Five categories addressed as:

- “Category I: Learning Goals and Content Presentation”
- “Category II: Interactions”
- “Category III: Assessment and Measurement”
- “Category IV: Instructional Media and Tools”
- “Category V: Learner Support Systems and Services” (pp. 4-6)

The authors, the publishing dates, the names, and the URLs of the guidelines are listed in Table 1.

TABLE 1
The Authors, the Publishing Dates, the Names, and the URLs of the Guidelines

<i>Authors, Date</i>	<i>Name</i>	<i>URL</i>
WCET, 2000	Best practices for electronically offered degree and certificate programs	http://www.wcet.info/resources/accreditation/Accrediting%20-%20Best%20Practices.pdf
NEA & Blackboard Inc., 2000	Quality On the Line: Benchmarks for Success in Internet-Based Distance Education	http://www.ihep.org/Pubs/PDF/Quality.pdf
Chickering & Ehrmann, 1996	The seven principles of good practice	http://www.tltgroup.org/programs/seven.html
ADEC, 1997	Guiding principles for distance learning and Teaching	http://www.adec.edu/admin/papers/distance-learning_principles.html
Penn State University, 1999	An emerging set of guiding principles and practices	http://www.outreach.psu.edu/DE/ide/guiding_principles/

CONCLUSION

Part I of the *Research in Distance Education Series* reviewed research examining and analyzing the research topics, methodologies, and quality in distance education. The researchers said that to enhance the quality of distance learning program evaluations should be implemented. Standards, guidelines, and benchmarks are the criteria to evaluate the program.

Part II of the series outlined the definitions, benefits, practices of standards, guidelines, and benchmarks. They are “performance expectations within the profession” of pedagogy and curriculum, instructional strategies, supports for learners’ and faculty’s need, administration and technology. They are to enhance accessibility, adaptability, and clarity of communication in distance education, examining the quality of learning, learning community, digital resources and inclusion. The various stakeholders developed standards, guidelines, and benchmarks based on their experience and their needs at institutional or regional level to maximize their best practice.

This literature review indicates three problems regarding the existing standards. First, they do not include the matters of inclusion of cultural, physical, economical and intellectual differences and learners’ learning preferences. Flexibility and contextual accommodation is the biggest benefit of distance education. Therefore, the standard on digital inclusion should be strengthened. Second, as mentioned earlier, standards, benchmarks, and guidelines were developed at the regional or institutional level. We assume that if everyone can share information via the Internet, then the standards exerting an ethical or legal effect on distance education, should also be considered. Third, stakeholders and technology in distance education build an intellectual partnership. Who teaches? Who is the stakeholder? Who delivers distance education? Will there be developed standards which protect the human’s intellectual property?

We, stakeholders of distance education hope that standards will be developed at the

national and international level to enhance accessibility, adaptability, clarity of communication, and humanization.

APPENDIX A

Quality on the Line

Benchmarks for success in Internet-based distance education prepared by the Institute for Higher Education Policy (2000).

Institutional Support Benchmarks

- A documented technology plan that includes electronic security measures (i.e., password protection, encryption, backup 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 themselves in analysis, synthesis, and evaluation as part of their course and program requirements.

Teaching/Learning Benchmarks

- Student interaction with faculty and other students is an essential characteristic and is facilitated through a variety of ways, including voice-mail and/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 online program, students are advised about the program to determine (1) if they possess the self-motivation and commitment to learn at a distance and (2) 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, and 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 World Wide Web.
- Faculty and students agree on 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, new services, and other sources.
- Throughout the duration of the course/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 online instruction and are assessed during the process.
- Instructor training and assistance, including peer mentoring, continues through the progression of the online 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/learning process is assessed through an evaluation process that uses several methods and applies specific standards.
- Data on enrollment, costs, and successful/innovative uses of technology are used to evaluate program effectiveness.
- Intended learning outcomes are reviewed regularly to ensure clarity, utility, and appropriateness.

APPENDIX B

ADEC Guiding Principles for Distance Teaching and Learning

Retrieved May 1, 2005, from http://www.ade.edu/admin/papers/distance-teaching_principles.html

- The learning experience must have a clear purpose with tightly focused outcomes and objectives.

Web-based learning designs must consider the nature of content, specific context, desired learning outcomes and characteristics of the learner. Learner-centered strategies include modular, stand-alone units that are compatible with short bursts of learning. Learning modules may also be open, flexible and self-directing.

- The learner is actively engaged.

Active, hands-on, concrete experiences are highly effective. Learning by doing, analogy, and assimilation are increasingly important pedagogical forms. Where possible, learning outcomes should relate to real-life experiences through simulation and application.

- The learning environment makes appropriate use of a variety of media.

Various learning styles are best engaged by using a variety of media to achieve learning outcomes. Selection of media may also depend on nature of content, learning goals, access to technology, and the local learning environment.

- Learning environments must include problem-based as well as knowledge-based learning.

Problem-based learning involves higher order thinking skills such as analysis, synthesis, and evaluation while knowledge-based learning involves recall, comprehension, and application.

- Learning experiences should support interaction and the development of communities of interest.

Learning is social and sensitive to context. Learning experiences based on interaction and collaboration support learning communities while building a support network to enhance learning outcomes. Multiple interactions, group collaboration and cooperative learning may provide increased levels of interaction and simulation.

- The practice of distance learning contributes to the larger social mission of education and training in a democratic society.

Changing mental models and constructing new knowledge empowers learners and encourages critical thinking. "Knowledge becomes a function of how the individual creates meaning from his or her experiences; it is not a function of what someone else says is true" (Jonassen, 1995).

APPENDIX C

ADEC Guiding Principles for Distance Learning updated, July 24, 2002

Retrieved October 1, 2005, from http://www.adec.edu/admin/papers/distance-teaching_principles.html

Design for active and effective learning

Principle: Distance learning designs consider

- specific context;
- needs, learning goals, and other characteristics of the learners;
- nature of the content;
- appropriate instructional strategies and technologies;
- desired learning outcomes; and
- local learning environment.

Support the needs of learners

Principle: Distance learning opportunities are effectively and flexibly supported, including

- initial disclosure of information on the learning opportunities;
- orientation to the process of learning at a distance, including use of technologies for learning;
- site and tutorial support;
- student advising and counseling;
- provision of technical support and library and information services; and
- problem-solving assistance.

Develop and maintain the technological and human infrastructure

Principle: The provider of distance learning opportunities has both a technology plan and a human infrastructure to ensure that

- appropriate technical requirements are established;
- compatibility needs are met;
- technology at origination and receive sites are maintained to ensure technical quality;
- learners and learning facilitators are supported in their use of these technologies; and
- partnering and collaboration are explored as appropriate.

Sustain administrative and organizational commitment.

Principle: Distance education initiatives are sustained by an administrative commitment to quality distance education, as indicated by

- integration of distance education into the mission of the organization;
- financial commitment to accommodate diverse distance learning needs;
- faculty development and reward structures;
- training to support learners, site facilitators, and technicians;
- marketing and management structures to promote and sustain distance education;

- cost-effectiveness reflected through best use of fiscal, technical, and human resources; and
- ongoing evaluation and research.

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