

AN INVESTIGATION ABOUT QUALITY STANDARTS FOR ONLINE EDUCATION

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Abstract: - Recently, the number of online education foundations is increasing. Also, the number of students is inevitably increasing in online education foundations. For that reason, the issue of quality assurance occurred in Turkey as in other contries. Experience and infrastructure are very important components of online education. Therefore, experts have to think the increment of online education foundations in terms of experience and infrastructure. The questions must be answered by experts of online education if we need quantities, qualities, or quantities and qualities both together.

Academic evaluation, quality control and accreditation are some of the main topics in online education on the agenda of higher education in the world. Research on online education shows us that online education is as powerful as face to face education if infrastructure of online education is prepared functionally. Quality standards have to be determined by comprehensive research in order to constitute functional infrastructure. But, there is some uncertainty about the quality for online education in reality. According to literature scan, there were no quality standards for online education in Turkey. Also, there is no obvious information about whether quality standards developed by other countries have been used for online education in Turkey. For that reason, quality standards must be determined for online education to guide how to constitute functional infrastructure at online education foundations. This study aims at providing opportunity pointed below for online education;

- to examine where quality standards developed in the world,
- to constitute public opinion about quality standards,
- to reason for determining quality standards compatible with our own educational culture.

Key-Words: - Education, Distance Education, Online Education, Quality Standarts

1 Introduction

Our era is called information age. Human beings have at last understood the importance of information and named the present era as the information age. With the introduction of computers in this information age, the way of our processing, keeping and carrying information has changed. Especially with the use of the internet, the speed of our reaching information has increased considerably. With the use of computers and the internet technologies in our daily lives, many changes have occurred from our communication methods to our learning styles and from our shopping habits to our civic duties. Concepts like e-learning, e-book, e-state, and e-citizen can be given as an example for such changes.

The computer and internet technologies have led to the introduction of certain methods that make our lives easy in all aspects. Since such technologies have also started to be used in education, there have occurred paradigm changes in education. In their study, Şahin and Kesim [1] explained in detail how the paradigm changes have occurred. With the paradigm changes in the area of educational sciences, several new concepts have also occurred like computer-assisted instruction, computer-based education, internet-assisted instruction, internet-based education, web-assisted instruction and web-based instruction. In the course of time, the instructional machines used by Skinner in education were also

replaced by computers that have internet connection and by educational softwares.

The phone and the letter used for the execution of distance-education activities were replaced by the computer and internet technologies. In many countries in the world, a number of institutions that give distance-education have been established. By applying the methods, techniques and principles in distance-learning, these institutions study on maintaining equal opportunities in education for individuals. Depending on the results of studies conducted all around the world, experts provided evidence for the fact that computer-assisted education and internet-assisted education increase student success in face to face education.

2 Education, Distance Education and Online Education

Information, communication and technology are among the most important concepts of the 21st century. The concept of ICT has occurred as a result of this importance. ICT is a concept that occurred with the integration of the concepts of information, communication and technology. The internet, computers, e-mail, chat programs, web, and the third-generation mobile phones can all be considered as information technologies. ICT is promoting fundamental changes in how we teach and learn. Barriers of time and place are

tumbling as technology offers new choices and opportunities for students and educators.

As a result of its integration with ICT in line with the constructivist theory, distance-education, which was not used once commonly in education, is now an alternative as strong as face to face education. ICT increases the flexibility of delivery of education so that learners can access knowledge anytime and from anywhere. In internet-based courses, there are interactions between student-student, student-teacher, and student-material. Thus, in such courses, a class environment can be established as in face to face education. With the use of ICT especially in distance-education, the interaction problem experienced in distance-education was avoided. By overcoming the limitations in distance-education, a number of institutions that give distance-education have been established in many countries in the world. Distance-education became popular with ICT and can now be considered as an alternative to face to face education. According to the current conjuncture in the world, especially learning is based on learning and life-long learning. In line with this vision, the need for online education has increased. As the following Table.1 illustrates, over one-fifth of all higher education students are now taking at least one online course in USA [2; as cited in 3].

Table 1. Total and Online Enrollment in Degree-granting Postsecondary Institutions – Fall 2002 through Fall 2007

	Total Enrollment	Annual Growth Rate Total	Students Taking at Least One Online Course	Annual Growth Rate Online	Online Enrollment as a Percent of Total
Fall 2002	16,611,710	NA	1,602,970	NA	9.6%
Fall 2003	16,911,481	1.8%	1,971,397	23.0%	11.7%
Fall 2004	17,272,043	2.1%	2,329,783	18.2%	13.5%
Fall 2005	17,487,481	1.2%	3,180,050	36.5%	18.2%
Fall 2006	17,758,872	1.6%	3,488,381	9.7%	19.6%
Fall 2007	17,975,830	1.2%	3,938,111	12.9%	21.9%

Cavanaugh [4] states the real reasons for the increase in distance education as follows:

- The delivery technology has become more affordable, available, familiar and interactive.
- Improvements in technology have caused distance courses to become more realistic, engaging, inexpensive and varied.
- Technology mediated distance education research has produced extensive evidence that shows distance education can be as effective as classroom instruction.

This shows that online education will one day be more common all around the world. Today, there are more applications of information Technologies in face to face education. Our study focuses on the concept of online education in line with the classification suggested by Allen and Seaman [3]. Online courses are those in which at least 80 percent of the course content is delivered online.

3 Quality Standards for Online Education

The rapid expansion of the Web as a potential course delivery platform, combined with the increasing interest in lifelong learning and budget constraints, has created a significant incentive for universities to develop online programs. As the technology is now available and relatively user-friendly, those universities which do not embrace it will be left behind in the race for globalization and technological development [5]. Key components that online developers and educators can use in their pedagogical process of Internet based environments to promote student satisfaction and learning effectiveness are instructional and design strategies, use of web-based tools and activities, and student participation [6].

In internet-based education, quality is an important issue. The inefficient experience of distance-education institutions regarding the internet environment makes the issue more significant. The measurement of learning and quality is open to discussion. Developers of faculty and student programs might recognize that learning is social, private, experimental and that higher order learning requires reflection and knowledge construction and therefore that these are key elements for quality assurance in online learning [7]. Since virtual education can cross all these boundaries simultaneously a variety of quality assurance issues need to be addressed [8].

The challenges of quality assurance arise because quality and quality assurance arrangements have been defined using traditional university categories. These traditional categories consist of national system of higher education, individual institutions and higher education sectors. The emerging categories are associated with borderless and virtual education, which suggest a need to redefine quality and quality assurance arrangements [4]. The rapid growth of online education has increased the guidelines and standards to be designed to ensure its quality. There is remarkable congruence among these newly created guidelines and standards. While most of them include specifications regarding the evaluation of internet based education, none provide the actual measurement tools needed to conduct quality assessment [9]. Several different organizations have been started to develop principles, guidelines, or benchmarks to ensure quality distance education. Some essential organizations are listed [9; 5]: American Council of Education (ACE), American Distance Education Consortium (ADEC), American Federation of Teachers (AFT) 2000, Commission on Higher Education of the Middle States Association of Colleges Schools, Global Alliance for Transnational Education (GATE), International Higher Education Policy (IHEP) 2000, National Education Association (NEA), Quality Assurance Agency for Higher Education 1999, Southern Regional Electronic

Board (SREB), Western Cooperative for Education Telecommunication (WCET) 1995.

The quality assurance benchmarks promoted by these organizations can apply to many institutions. Virtually, all the strategies include such topics as course development, faculty training, student services, learning resources, infrastructure and assessment of outcomes, finance, collaboration with other organizations, accreditation, management, content, instructional design, student assessment, technology, learning resources and so on... [5; 10; 11; 13]. In order for students or institutions to determine whether quality has been achieved, quality must first be defined. Cavanaugh [4] introduce quality as;

Quality: This indicates that instructions are effective and appropriate; it might also include quantitative elements such as completion rates, student performance and evaluations of the learning experience. Qualitative dimensions may include ratings of teaching and learning events, materials, learning process, pace, activities, content and options offered to students.

Higher education organizations raised the issue of quality in distance education on: how can a teaching and learning process that deviates so much from what has been practiced for hundreds of years embody quality education? This question has been addressed in many ways by the range of benchmarks developed by a variety of organizations concerned about quality distance education [14]. In order to determine the quality standards and to avoid the uncertainties in internet-based distance education, the case study conducted by the IHEP was based on three reasons [14].

The case study executed by IHEP focused on Internet-based distance education for three reasons [14].

- First, Internet-based distance education is becoming the predominant technology in distance education. Internet-based distance education will be a growing avenue for technology mediated learning in the future.

The National Center for Education Statistics (NCES) [12] reports shows that not only is Internet-based distance education the most prevalent technology; it is also the fastest growing. At least 58% of the reporting institutions that offered distance education used Internet-based courses compared with 54% who used two-way interactive video and 47% who used one-way prerecorded video. Of the institutions that offered Internet-based courses, three increased from 22% to 58% in 3 years. The use of all other technologies had actually declined since 1994-95 [14].

- Second, Internet-based distance education allows the teaching/learning process to occur “at any time and any place.”

The mission of Open University is open to people, places, methods and ideas. It promotes educational opportunity and social justice by providing high-quality university education to all who wish to realise their ambitions and fulfil their potential. The Open University (OU) is the United Kingdom's only university dedicated to distance learning. OU has around 150,000 undergraduate and more than 30,000 postgraduate students. 10,000 of OU's students have disabilities. Nearly all students are studying part-time. About 70 per cent of undergraduate students are in full-time employment. More than 50,000 students are sponsored by their employers for their studies. Most OU courses are available throughout Europe. Some of them are available in many other parts of the world. More than 25,000 OU students live outside the UK [15].

- Third, because of these features, Internet-based distance education is, in many ways, fundamentally different than traditional classroom-based education. Among other things, it is this distinctly different concept of time that engenders concern and skepticism from many in the higher education community.

Many people, particularly those who lack firsthand familiarity with distance learning, are frankly suspicious of distance education and think that distance education programs have either low standards or even no standards [16]. Some of educators remain skeptical about distance education. Believing that teaching and learning are inherently social processes, these educators consider "same-time same-place" interaction central to a successful educational experience [17]. Therefore, when it comes to online education more research is needed about quality [16].

4 Successful Samples

In one study, Coldwell [18] tried to execute the course of computer ethics on internet-basis. At the end of this three-year study, the researcher reported that computer ethics can be effectively executed via the internet and title the study as "It is possible to teach computer ethics via distance education!" Coldwell pointed out that teaching the course of computer ethics on internet-basis is far more difficult than traditional teaching methods and that the institution should have the necessary infrastructure for such teaching. The researcher added that if the present infrastructure can not easily be used, then technology does nothing but presents the content of the course [18]. This successful result proved that even such a content as that of the course of computer ethics which requires changes in attitudes can easily be learnt by students when the necessary infrastructure is established. The established of the infrastructure in

question depends on the application of quality standards in internet-based distance education.

In another study carried out by the Federation of American Teachers with the participation of 200 teachers, the teachers, when provided with sufficient time, appropriate tools and education, reported that they believe they can successfully give distance education courses to ambitious students with the help of appropriate equipment. Of all the participants that gave functionally-designed distance-education courses, 169 of them wanted to give the distance-education courses once again, while the others stated that they did not want to teach such courses again. These respondents reported that students who successfully completed their distance education courses performed the same (109) or better (55) than students in comparable courses that they taught in the traditional classroom did [17]. The study, with its findings, supported the view that the course designs intended to be more functional through distance-education methods requires stronger and more serious experience and infrastructure. Internet-based distance-education designed and executed considering the quality standards is a more powerful alternative to traditional education.

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