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Issues of Accessibility and Quality in Open and Distance Learning and e-Learning Transformative Support

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Abstract: With the advent of smart technology, features of open and distance education are in transformative condition all over the world. Smart technologies have offered smart solutions to open and distance learning programs to overcome the issues of accessibility and quality. The purpose of this study was to investigate the issues of academic and administrative support services affecting quality and accessibility among the students of Allama Iqbal Open University (AIOU) Islamabad. The study was quantitative following a survey method. Sample of the study was 120 postgraduate students from Islamabad region of AIOU. A questionnaire designed by the researcher on various issues of ODL was used to collect data. The data were analyzed using percentages, mean score and standard deviation. Results showed that the participants agreed that technological innovation has resulted in smart solutions to various issues related to academic and administrative services in ODL. Smart technologies have led towards accessibility, flexibility, collaboration, increased interaction and motivation and quality assurance practices. The students and the teachers agreed that smart technologies created a more collaborative, supportive and interactive environment that enhanced level of engagement and creativity among distance learners. However, they also agreed that current standards of pedagogy and content in AIOU were not up to the mark. Certain measures have been taken to enhance the use of smart technology for students, tutors, teachers and the administration to meet the needs of the learners and the faculty in ODL. Data indicated that smart technologies have facilitated in course files, study material, assessment procedure, examination information, student-tutor interaction and has resulted in reducing the cost. It was recommended that smart technologies may be made available for learners and the teachers. Adequate training in the use of smart technologies may benefit at larger scale aiming at wider access and effective quality measures.

Keywords: Accessibility; Quality; Interaction; E-learning; Open and distance education

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INTRODUCTION

Today Smart technologies have changed teaching and learning styles and have offered a new vision of content and pedagogy. Provision of education anywhere and anytime through smart technologies is going to be a belief of education institutions all over the world.

e-learning is an innovative development in many educational institutions (Foray 2004). It has changed traditional ways of teaching and learning. It has become a vital part of teaching and learning in open and distance education programs. Higher education institutions, in particular, are interested in adopting this innovation to break both the limitations of time and the place of classroom sessions (Guri-Rosenblit 2005). Due to greater flexibility and accessibility of e-learning in open and distance education, it has opened new ways of teaching and learning.

The fast increasing growth of e-leaning in higher education institutions may include the following factors:

(1) There is a decrease in the costs of information and communication technologies and accessibility to such technologies offers many learning opportunities.

(2) The capacity of ICT to support and enrich conventional educational practices through web-based learning and synchronous and asynchronous communications.

(3) Flexible ways of learning provide flexible access to meet the students' demands. Part-time students are more interested in e-learning courses.

(4) Many educational institutions believe that the application of ICT will enable them to increase their capability to accommodate more students.

(5) Such technology environment sets challenging tasks for educational institutions to perform better to attract the students.

(6) The number of e-learning courses is growing, and many more institutions are planning to establish such courses because of the prevailing expectation that online learning will reduce costs, increase productivity and enhance institutional efficiency.

This paper argues that use of e-Learning with smart technologies in distance education has offered wider accessibility and improved its quality in various aspects. These issues are widely faced by the students of open and distance learning institutions. Smart technologies have brought a change with regard to learning styles of the learners. Distance education learners need flexibility regarding time, place and technology based pedagogy. Smart technology in distance learning improves delivery of instruction and reduces academic and administrative barriers.

PURPOSE OF THE STUDY

The purpose of this study was to examine the issues of accessibility and quality in an open university and how students believe that e-Learning can support to transform learning in ODL.

REVIEW OF LITERATURE

The big change in cyberspace is online learning, or e-learning. Essentially, it involves the use of web technologies and now smart technologies to deliver broad solutions enabling lifelong learning (Paul and Bernard, 2001). Smart technologies are being utilized to raise standards in the teaching profession. They are also focusing on enhancing motivation and

collaboration through e-networks. Some fear that this may consign the teacher to the role of a mere facilitator. However, it must be remembered that technology provides nothing more than a framework and delivery infrastructure to enable educators to be as imaginative, creative, and flexible as they wish (Paul and Bernard, 2001).

Quality in ODL can have different meanings for governments, employers, institutional managers, faculty members and researchers. Governments may require assurance of the socio-economic benefits (Aslam, 2006; Koul, 2006), institutions may observe concern about quality of their management, courses, delivery, learner support, assessment systems and completion and graduation rates (McIlroy & Walker, 1996; Hope, 1999; Jung, 2005a), and teachers and researchers may have more interest in the nature, depth and extent of the learning (Sherry, 2003; Ehlers, 2004) and provision for lifelong learning (Burge, 1988; Paul, 1990).

Distance institutions may have different criteria and standards on quality. Some of them claim to observe high standards in their programs. However, distance education learners may not be getting the type of skills which are demanded to meet the requirements of labor and industry. From the 1970s onwards, distance and open universities emerged to provide education to those who were unable to attend or seek entry in conventional institutions. The purpose was to provide accessible and flexible education to the doorstep of every individual who was deprived of education due to certain reasons of formal education. First Open University was Thailand's Ramkhamhaeng University, in 1971 and Three years later, Pakistan established the Allama Iqbal Open University and then open universities were established in Israel, Palestine, Iran, Turkey, Sri Lanka, India, Bangladesh, Indonesia, China, South Korea, Japan, Hong Kong, Macau, Vietnam and the Philippines. The most recent Open University is the private Open University Malaysia, which opened in 2000. A decade ago, Daniel (1996) characterized seven of these institutions as 'mega-universities' on the grounds that they had more than 100,000 active degree-level students. Today many of the above open universities have larger enrolments, far exceeding this number (Insung and Colin, 2007). One challenge facing Asia's ODL institutions is how to assure and improve quality while widening access and reducing costs and how to establish which approach best supports this. It might have been assumed that globalization, cross-border ODL and technology would have led to some policy diffusion and standardization of quality assurance procedures in Asian ODL, but, in fact, there is considerable variation in the ways these countries and institutions manage their quality assurance systems (Jung, 2004b, 2005a, c).

ODL institutional quality assurance procedures typically cover planning, management and administration, course design, development and delivery, learner support, assessment and technology applications. Currently ODL institutions are employing smart technology to handle the issue of quality and accessibility. Studies also revealed that online education is becoming increasingly popular. The number of online courses continues to increase, and larger numbers of students are taking significant portions of their coursework online. Some factors like pedagogical factors that includes learner centered teaching activities, learning environments and learning recourses; technical factors; students support; faculty support; evaluation factors and instructional factors all constitute a framework of quality and accessibility in ODL institutions.

METHOD AND SETTING

Allama Iqbal Open University (AIOU at which this study was undertaken, is one of the mega Open Universities in Asia. AIOU is a unique distance education institution in Pakistan which provides education from basic to doctoral level programs with its large number of regional centers. It has been providing and expanding its educational and training facilities to help working people and females to enhance their qualification and occupational skills.

It is one of the biggest universities in the country with average student enrolment of more than 1.2 million per year, with more than 2000 courses being offered, 9 regional campuses, 33 regional centers, 41 approved study centers (for face-to-face programs) and 138 part-time regional coordinating offices, 1172 Study Centers are established throughout Pakistan. The university provides the largest Teacher Education institution in Pakistan with average enrolment of above 400,000 Students. There is a Provision of networking facilities between the main campus and the region to exchange data/information and resolving the students' complaints.

Distance education institutions have experienced a big change with the advent of information and communication technologies like satellite and internet. Internet has become a big digital source of research and information.

The research design was of survey type. It was quantitative in nature. The sample of this study was 120 students enrolled in master in Education, semester Spring 2013 in Islamabad region of AIOU.

The instrument used for data collection was a self-designed questionnaire, that was, "Smart Technology for Accessibility and Quality in Distance Learning (STAQDL)". Smart Technology includes computers, tablets and smart phones with internet. The questionnaire was comprised of 35 items related to five factors of accessibility and quality in distance learning using a 5-point Likert-type response format (5=strongly agreed, 4= agree, 3=undecided 2=strongly disagree and 1= disagree). The questionnaire was improved in the lights of the comments of the experts. The questionnaire was administered by the researcher with the help of research assistants. Thus data were collected in person that ensured 100% rate of return.

RESUTLS

Analysis was carried out using SPSS. Percentage and mean score were calculated. Following were the results:

Table 1. Students' responses on e-Learning support to Support Services factor in distance education

	Frequency and Percentage					Mean
Support Services Factor	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
Training and support to maximize accessibility in distance education	42	39	23	11	5	
	35%	32.5%	19.2%	9.2%	4.2%	2.15
Design of distance education program	27	55	15	22	1	
	22.5%	45.8%	12.5%	18.3%	.8%	2.29
Staff and equipment support	13	53	39	13	2	
	10.8%	44.2%	32.5%	10.8%	1.7%	2.48

Table 1 revealed that views of learners on support services factor that included use of e-Learning in training to increase accessibility; developing design of distance education program and using e-Learning to provide staff and equipment to support teaching learning process in distance education was towards agreement. Most of the learners (67.5%) agreed that e-Learning in distance education supports in training, program designing and such networking with staff and equipment facilitates the learners in ODL.

Table 2. Students' responses on Technical Factor for student support in distance education

	Percentage					Mean
Technical Factor	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
Accessibility of smart technologies (hardware and software)	18	34	18	32	18	
	15.0%	28.3%	15.0%	26.7%	15.0%	3.02
e-Learning makes layout of a course flexible that enhances accessibility to the learner	18	41	18	29	14	
	15.0%	34.2%	15.0%	24.2%	11.7%	3.17
Delivery of a course with smart technology in distance education	15	53	13	30	9	
	12.5%	44.2%	10.8%	25.0%	7.5%	3.29

Table 2 showed that views of learners on technical factor that included accessibility of smart technologies, flexible layout of a course and delivering of course material in terms of instruction, information and teaching activities using e-Learning were towards agreement. Most of the learners (mean score 3.02, 3.17 and 3.29 respectively on the three sub aspects) agreed that e-Learning in distance education supports when there is accessibility to smart technologies.

Table 3. Students' responses on Pedagogical Factors with e-Learning in distance education

	Percentage					Mean
Pedagogical Factor	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
Communication and interactivity	20	42	20	24	14	
	16.7%	35.0%	16.7%	20.0%	11.7%	3.25
Learning resources	12	44	26	25	13	
	10.0%	36.7%	21.7%	20.8%	10.8%	3.14
Students centered teaching and learning	09	35	18	34	24	
	7.5%	29.2%	15.0%	28.3%	20.0%	2.76

Table 3 showed that views of learners on pedagogical factor that included communication and interactivity, learning resources and student centered teaching and learnin were towards agreement. Most of the learners (Mean score= 3.25, 3.14 and 2.76 respectively on the three sub aspects) agreed that e-Learning in distance education supports and enhances factors of pedagogy like communication and interactivity, learning resources and student centered teaching and learning.

Table 4. Students' responses on Evaluation Factors with ELearning in distance education

	Percentage					Mean
Evaluation Factor	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
Student satisfaction	23	50	9	22	16	
	19.2%	41.7%	7.5%	18.3%	13.3%	3.35
Teacher satisfaction	21	40	17	26	16	
	17.5%	33.3%	14.2%	21.7%	13.3%	3.20
Cost effectiveness	27	53	10	27	3	
	22.5%	44.2%	8.3%	22.5%	2.5%	3.62

Table 4 showed that views of learners on evaluation factor that included student satisfaction, teacher satisfaction and cost effectiveness using e-Learning were towards agreement. Most of the learners (mean score 3.35, 3.20 and 3.62 respectively on the three sub aspects) agreed that e-Learning in distance education supports student satisfaction , teacher satisfaction and cost effectiveness regarding evaluation factors when there is accessibility to smart technologies.

Table 5. Students' responses on Institutional Factor in distance education

	Percentage					Mean
Institutional Factor	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
Infrastructure	24	44	19	26	7	
	20.0%	36.7%	15.8%	21.7%	5.8%	3.43
Administrative support	11	45	21	28	15	
	9.2%	37.5%	17.5%	23.3%	12.5%	3.08
Student support	15	42	19	29	15	
	12.5%	35.0%	15.8%	24.2%	12.55	3.11

Table 5 showed that views of learners on institutional factor that included infrastructure equipped with smart technologies, administrative support and students support were towards agreement. Most of the learners (mean score 3.43, 3.08 and 3.11 respectively on the three sub aspects) agreed that e-Learning in distance education supports when there is accessibility of infrastructure rich in technology , administrative support using technology and student support using technology.

Table 6. Students' responses on e-Learning Environment in distance education

	Percentage					Mean
e-Learning Environment	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	
Collaborative Orientation	17	48	11	32	12	
	14.2%	40.0%	9.2%	26.7%	10.0%	3.22
Research	15	50	35	16	4	
	12.5%	41.7%	29.2%	13.3%	3.3%	2.53
Critically Thinking	20	45	31	18	6	
	16.7%	37.5%	25.8%	15%	5%	2.54

Table 6 showed that views of learners on e-learning environment that creates collaborative orientation (Mean= 3.22), research (Mean= 2.53) and critically thinking (Mean= 2.54) indicate that learners were agreed that e-learning environment develops collaboration, research attitude and critical thinking among distance education learners.

DISCUSSION AND CONCLUSION

Results indicate that use of smart technologies with e-Learning are transforming many features of teaching learning processing open and distance education institutions. Research studies (Dinevski and Plenkovi 2003; Caplan 2004; Grafstein 2007) reveal that an e-learning environment does support to enhance interaction and critical thinking skill in higher education institutions. Now Teachers have better and variety of ways to teach with the ever changing nature of technology. It also emphasized on the need to develop critical thinking skills

(Halpern, 1998). All ODL providers should see it as part of their task to assess, assure, and improve quality. Governments, employers and communities have concerns about what students should learn, how they should learn, and how they should be judged to have learned. High standards tend to be equated with traditional content, pedagogy and assessment methods.

Open and distance education institutions are required to integrate e-learning experiences from organizational and pedagogical perspective. Use of e-learning experiences and activities utilizing smart technologies may support learners and the teachers to collaborate effectively. It may improve communication and interactivity, learning resources, flexible interactive environment and develop critical thinking.

Ehlers and Schneckenberg (2010)state that future universities should integrate technology in teacher and learning that may bring a change in administrative and academic culture and in infrastructure as well.

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