Effect of Online Education on Distance Learner's Achievement at AIOU

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Abstract

Online education is the development and production of the personal computer, the globalization of thoughts and other human acts of people. Audio, video, computer, and networking technologies are often collective to create a multifaceted instructional delivery system. The study aimed 1) To identify the access of OLIVE for distance learner. 2). To explore the use of OLIVE on achievement of distance Learner.3). To enlist the problems faced by distance learners in OLIVE. A sample of 60 students of PGD (CS)

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12 : 8 August 2012
Madiha Islam, Ph.D. Scholar (Education), Muhammad Javed Iqbal, Ph.D.
Mian Baqar Hussain Qureshi, Ph.D. Scholar (Education), and Nuzhat Kalsoom Shahzadi,
Ph.D. Scholar (Education)
Effect of Online Education on Distance Learner's Achievement at AIOU   204

was taken. A questionnaire was used as a research tool for the collection of data. Collected data were analyzed by percentage and mean score. Main findings of the study revealed that online learning enhances the quality of learning and improves learning skill of the distance learner. Online education increases motivation and collaborative learning encourages competition. It was recommended that the online course developer, instructor, or teacher should focus on designing online learning environments that support exploratory and dialogical learning. Exploratory and dialogical learning environments engage learners in online learning activities that require collaboration, communication, social interaction, reflection, evaluation, and self-directed learning.

Key words: Online education, OLIVE, Achievement, Distance learner,

INTRODUCTION

Allama Iqbal Open University is a pioneer institution in non-formal and distance education in Pakistan. AIOU provides an opportunity for working people to upgrade their qualifications without giving up their jobs or homes. In Pakistan, distance education is particularly friendly to the female population as it offers them an opportunity to study at home. Similarly, people living in the tribal and far-flung areas far from conventional educational institutions, have a chance to be educated. Allama Iqbal Open University in its new paradigm, distance education encompasses and relies on the use of information and communication technologies.

Department of Computer Science engaged in E-learning activities in 1999 and the idea of Open Learning Institute of Virtual Education (OLIVE) was approved in 2001. This was first milestone towards E-learning. The work was started to establish

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Madiha Islam, Ph.D. Scholar (Education), Muhammad Javed Iqbal, Ph.D.
Mian Baqar Hussain Qureshi, Ph.D. Scholar (Education), and Nuzhat Kalsoom Shahzadi, Ph.D. Scholar (Education)
Effect of Online Education on Distance Learner's Achievement at AIOU   205

infrastructure and facilities required for E-learning. Initially course materials and Learning Management System (LMS) were developed for E-education. Online classes were conducted at AIOU main campus, Lahore region and from other places during four semesters from spring 2002 to autumn 2003. Based on the experiences, DCS decided to offer PGD (CS) in online mode from spring, 2005 semester due to effectiveness of E-learning and its low cost, fast communication methods and automated performance measurement mechanisms that enhance the quality of learning.

Open Learning Institute of Virtual Education (OLIVE) is a teaching and learning management system that allows teacher and students to interact in a virtual classroom by enabling web-based management and delivery of courses. It provides an electronic framework for delivery of course work, syllabi, schedules, presentations, text-based discussions, chat, online digital resources, assignment grading, quizzes and test that are accessible from any part of the world at any time.

OLIVE an e-Learning Framework

OLIVE framework as outlined in Figure 1 was developed by Sangi. It is investigate to combine many online education, teaching, and research, operational and administrative activities which would be needed in future when online student enrolment grows rapidly. The OLIVE model of online education was approved in the Academic Council in year 2000. Multimedia courseware development (high quality electronic content) was considered essential for quality learning and was immediately started. To date some development work on OLIVE components from serial 1-7 have been performed. Multimedia courseware Design Center project helped to develop components

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12 : 8 August 2012
Madiha Islam, Ph.D. Scholar (Education), Muhammad Javed Iqbal, Ph.D.
Mian Baqar Hussain Qureshi, Ph.D. Scholar (Education), and Nuzhat Kalsoom Shahzadi, Ph.D. Scholar (Education)
Effect of Online Education on Distance Learner's Achievement at AIOU   206

1,2,4,5 and 6. Where as, the second project IT Services Networking helped to develop components 3, 5, 6 and 7 as shown in the figure. University Video Conference systems are also integrated to OLIVE framework to support postgraduate research. Components 8 and 9 are also developed and implemented.

Figure 2.1 Components of OLIVE E-Learning Framework

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Madiha Islam, Ph.D. Scholar (Education), Muhammad Javed Iqbal, Ph.D.
Mian Baqar Hussain Qureshi, Ph.D. Scholar (Education), and Nuzhat Kalsoom Shahzadi, Ph.D. Scholar (Education)
Effect of Online Education on Distance Learner's Achievement at AIOU   207

| (1)
Academic Media Development
Course Materials, Digital Content Assignments Exercises Knowledge Objects Databank Assessment Objects Databank | (2)
Academic Services
OLIVE LMS
(Online media, Tutor schedules, Assignments, Forums, tests etc.)
Tutor/Advisors Pool Academic Support | (3)
Admission & Counseling Services
Academic Website Online Admissions
Student Counseling Call Center | (4)
Media Production
Graphics Design A/V Production MM Integration,
Multimedia CD Content Web Media Production, |

Source: Sangi (2005). "Engineering Quality Learning through ICT: An AIOU Model for Online Education and Research"

Learning management systems (LMS) are at the forefront of the online technologies making a serious impression on patterns of learning and teaching in higher
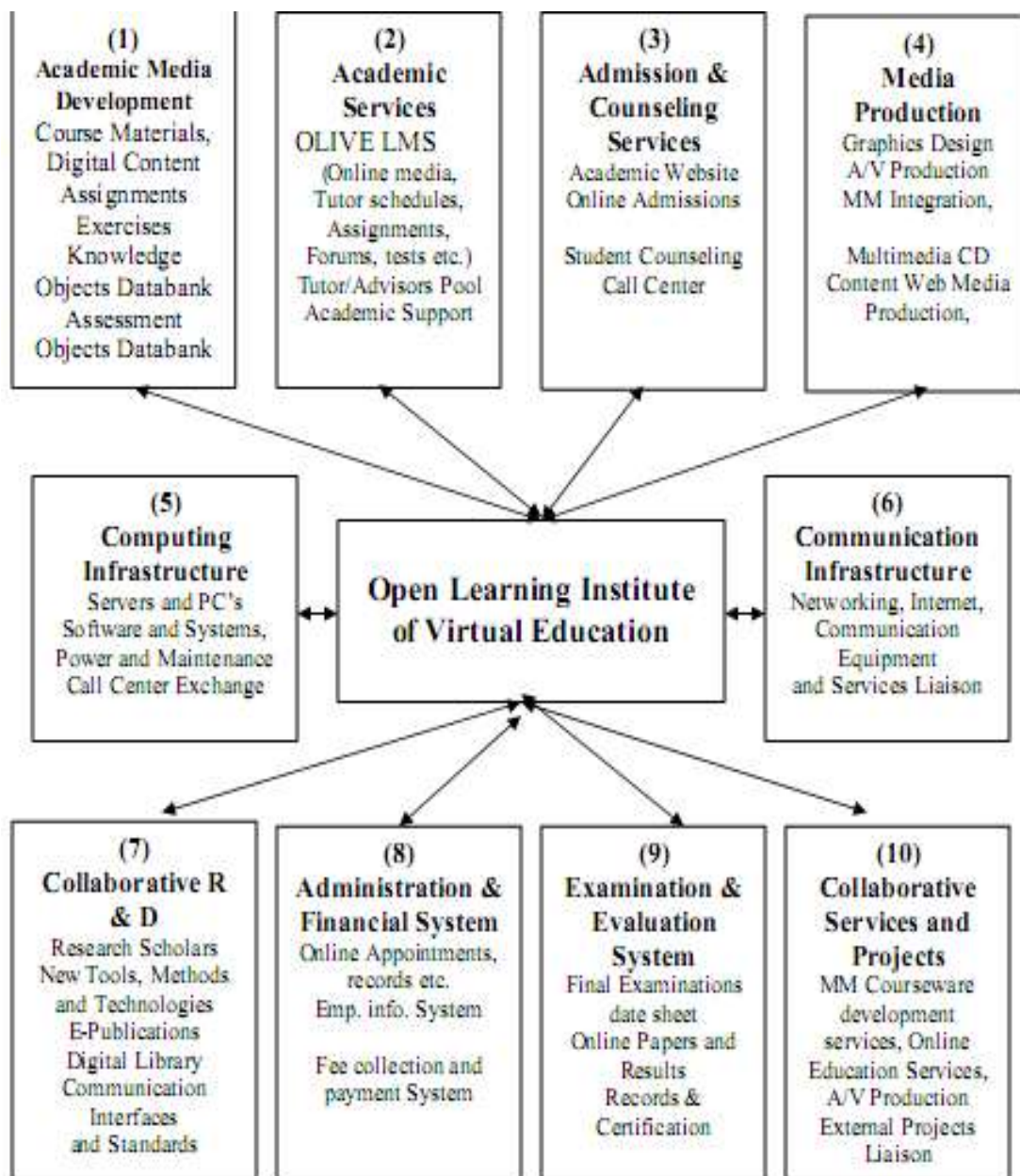
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12 : 8 August 2012
Madiha Islam, Ph.D. Scholar (Education), Muhammad Javed Iqbal, Ph.D.
Mian Baqar Hussain Qureshi, Ph.D. Scholar (Education), and Nuzhat Kalsoom Shahzadi, Ph.D. Scholar (Education)
Effect of Online Education on Distance Learner's Achievement at AIOU   208

education (Coates, 2006). LMS, also commonly referred to as course management systems (CMS) and virtual learning environments (VLE), are becoming everywhere at universities around the world, adding a virtual dimension to even the most traditional campus-based institution (Coates, 2005). In a relatively short time they have become perhaps the most widely used educational technology in higher education, only ranking behind the Internet and common office applications (West, Waddoups and Graham, 2006). They are being used for presenting online or technology-enhanced classes and it has been said that they influence pedagogy, and therefore engagement, by presenting default formats that are designed to guide instructors toward creating courses in certain ways (Lane, 2009). If LMS are affecting pedagogy, then they are likely to be affecting student study habits, learning and engagement (Coates, 2005).

According to Caruso, 2006), the fundamental measure of student experience with an LMS is the degree to which students use the system. This appears to align with the historical precedent where class attendance is used as a metric for measuring face-to-face student engagement (Douglas and Alemanne, 2007). Learning Management System is a broad term that is used for a wide range of systems that organize and provide access to online learning services for students, teachers, and administrators.

Achievement

According to Smitnen (1994) David McClelland has developed a theory on three types of needs 1) Power 2) Affiliation 3) Achievement. People with high need for achievement are more hard working because they have confidence in their own abilities. High need for achievement level is a prerequisite to set challenging goals and to put in

Madiha Islam, Ph.D. Scholar (Education), Muhammad Javed Iqbal, Ph.D.
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efforts to achieve those goals. Achievement is the critical factor in determining individual level of performance. Student achievement means the skill, knowledge base expected of students for a particular subject area at a particular grade level.

Objectives of the Study

The study was designed to identify access of OLIVE for distance learner. To explore the use of OLIVE on achievement of distance Learner and to enlist the problems faced by distance learners in OLIVE were also ascertained in this study.

Methodology of the Study

The study was descriptive in nature therefore, survey was considered appropriate for this study.

Population

The population of the study consisted of all students of PGD(CS) spring 2010 enrolled at AIOU Islamabad was taken as population.

Sampling

100 % population was taken as a sample.

Development of Research Instrument

In this survey study, a questionnaire on five point (Likert scale) was used for the collection of data. In the questionnaire, items about Olive access towards teaching learning process, use of OLIVE on achievement of distance learners, individual development and problems faced by distance learners in OLIVE were asked in order to elicit the valuable opinions of the respective respondents.

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Mian Baqar Hussain Qureshi, Ph.D. Scholar (Education), and Nuzhat Kalsoom Shahzadi, Ph.D. Scholar (Education)
Effect of Online Education on Distance Learner's Achievement at AIOU   210

Administration of Research Tool

The questionnaire was administered personally. Questionnaire for students was given to them in a workshop held at main campus Islamabad, and some of them received the same through e-mail as well as by post. Questionnaires from 56 students out of 60 were returned back which were finally analyzed.

Analysis of Data

The data collected through Questionnaires were analyzed by applying percentage and mean score.

Table 1 **Olive access and teaching learning process**.

S.No	Statements	SA	A	UNC	DA	SDA	%	Mean
01	Student can easily access the educational material.	8	44	4	0	0	92.7	4.07
02	Content of study material is easy to understand.	4	34	6	10	2	67.9	3.5
03	OLIVE enhance the quality of learning in IT discipline.	4	34	2	14	2	67.9	3.42
04	Student can easily access	2	28	12	10	4	53.5	3.25

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Mian Baqar Hussain Qureshi, Ph.D. Scholar (Education), and Nuzhat Kalsoom Shahzadi,
Ph.D. Scholar (Education)
Effect of Online Education on Distance Learner's Achievement at AIOU   211

S.No	Statements	SA	A	UNC	DA	SDA	%	Mean
	the online tutorial support.							
05	Student can easily access other online activities.	4	44	4	4	0	85.7	3.85
06	During the lecture friendly learning environment.	8	24	10	12	2	57.1	3.42

Scale value for this table is SA(Strongly Agree)=5, A(Agree)=4, UNC(Uncertain)=3, DA (Disagree)=2, SDA (Strongly Disagree) =1

Table 1 shows that in online education, students can easily access the education material, online tutorial support and other online activities. During the lecture, there is friendly learning environment, and content of study material is easy to understand. A large number of respondents was uncertain about online tutorial support and friendly learning environment. Similarly the mean score is above 3.24.

Table 2   Individual development and achievement

S.No	Statements	SA	A	UNC	DA	SDA	%	Mean
01	OLIVE develops motivation in the learner	6	38	4	6	2	78.5	3.71
02	OLIVE increases professional development in the learners.	8	36	6	4	2	78.6	3.75

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Mian Baqar Hussain Qureshi, Ph.D. Scholar (Education), and Nuzhat Kalsoom Shahzadi,
Ph.D. Scholar (Education)
Effect of Online Education on Distance Learner's Achievement at AIOU   212

03	OLIVE provides collaborative learning opportunities.	6	36	4	6	4	75	3.60
04	OLIVE improves learning skill of the distance learner.	16	32	4	4	0	85.7	4.07
05	Learning management system helpful for better academic achievement.	4	36	6	8	2	71.5	3.60
06	It enables the learner to give online feedback on the spot.	10	40	6	0	0	89.3	4.07

Scale value for this table is SA (Strongly Agree)=5, A (Agree)=4, UNC (Uncertain)=3, DA (Disagree)=2, SDA (Strongly Disagree) =1

Table - 2 shows that online education has a positive effect on individual development and achievement. Majority of respondents 71% said that online education improves the learning skill of the distance learners and develops motivation and professional development. It provides collaborative learning opportunities to the learner and encourages for better academic achievement. Similarly, mean score is more than 3.59. It is very interesting to note that online education enables the learner to give online feedback on the spot.

Table .3   Problems of students in OLIVE

S.No	Statements	SA	A	UNC	DA	SDA	%	Mean

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12 : 8 August 2012
Madiha Islam, Ph.D. Scholar (Education), Muhammad Javed Iqbal, Ph.D.
Mian Baqar Hussain Qureshi, Ph.D. Scholar (Education), and Nuzhat Kalsoom Shahzadi, Ph.D. Scholar (Education)
Effect of Online Education on Distance Learner's Achievement at AIOU   213

01	At the lecture time, electricity is present.	8	20	12	2	4	49.9	3.28
02	Internet is easily available.	8	36	2	4	6	78.6	3.64
03	Computer service in case of disorder is difficult.	6	38	6	6	0	71.4	3.78
04	Student face problem of software.	6	34	4	8	4	71.4	3.55
05	Student face problem of virus.	7	33	4	8	4	71.4	3.55
06	Student may forgot his/her password.	12	12	10	14	8	43	3.10

Scale value for this table is SA (Strongly Agree)=5, A (Agree) =4, UNC (Uncertain)= 3, DA (Disagree)=2, SDA (Strongly Disagree)=1

Table -3 shows that students face problem of hardware, software and virus. Electricity and Internet accessibility are major problems. It was a great surprise that some of the respondents remain uncertain about power failure. The students have also problem of forgetting the password. Majority of the respondents agreed that the above mentioned barriers were major problems for them in online education.

Conclusions

Distance learners have easy access to educational material and other online activities. Online education enhances the quality of learning because the content of study material and language of lecture are easy to understand. Students have easy access to online tutorial support with friendly learning environment. Online education improves the

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Mian Baqar Hussain Qureshi, Ph.D. Scholar (Education), and Nuzhat Kalsoom Shahzadi, Ph.D. Scholar (Education)
Effect of Online Education on Distance Learner's Achievement at AIOU   214

learning skill of the distance learner with online feedback. Online education motivates students to make decision about the task assigned to them and this helps improve distance learning of distance learner. The analysis showed that male students perceived online education more useful than the female students. It was also concluded that collaborative learning encouraged competition among students. It also encouraged the students to ask questions about their queries and the problems they encountered. Internet is easily available but the students face problem of hardware, software and viruses.

Recommendations

On the basis of conclusions, following recommendations were drawn:

The online course developer, instructor, or teacher should focus on designing online learning environments that support exploratory and dialogical learning. Exploratory and dialogical learning environments engage learners in online learning activities that require collaboration, communication, social interaction, reflection, evaluation, and self-directed learning. Online courses may include weekly quizzes or assignments. Social interaction is very important for online collaborative group work. So, there is much need to improve online education. Learning centers should be available to students. For many students taking classes at home is not a viable option for a number of reasons. There is need to establish learning centers to meet the needs of such students.

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Mian Baqar Hussain Qureshi, Ph.D. Scholar (Education), and Nuzhat Kalsoom Shahzadi,
Ph.D. Scholar (Education)
Effect of Online Education on Distance Learner's Achievement at AIOU   217