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DEMANDING NEED OF GROWING TECHNOLOGIES IN DISTANCE LEARNING SYSTEM

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ABSTRACT

In distance education system use of different media enable the learners to start the course of study independently. The appearance of the internet and the expansion of web have now changed distance learning from a broadcasting way to an interactive way, and allowed connecting the learners and instructors who are geographically divided.

Technological advances have created a paradigm shift in education and the definition of distance learning, as described by James Morrison (1996), who states that telecommunications, software, and the Internet eliminate walls and boundaries. In addition, he states that an increasing number of students want and need non-traditional, flexible schedules.

Main findings of the study revealed that majority of the distance learners need growing technologies to interact with the tutors and peers for academic guidance and use of latest technologies make distance learners more up to date and helpful for better academic achievements.

Majority of the students agreed that without any training distance learner cannot use growing technologies. It was recommended that AIOU may take steps to organize a specific website for the MS/M.phil and Ph.D scholars so that they can easily interact with peers and tutors.

A comprehensive training programme may be launched to enable the tutors for using growing technologies so that they can facilitate the learners by using latest methods of teaching. Virtual classrooms can be started along with the workshops. Students and academicians of education department may use latest technologies and internet softwares which can be helpful for academic purpose.

Keywords: Growing technologies, distance learning, Allama Iqbal Open University.

INTRODUCTION

According to Jack Scott (April 2011, p. 3) "Distance education focuses on the design of pedagogy, technology and instructional systems for students who are not physically present in the same location with the instructor". According to Kinley, (2001, p. 7) "today's distance education focus has dramatically shifted toward network-based technologies (in general) and Internet-based delivery (more specifically)". Distance learners are generally far away from the institution and instructor; and they feel loneliness so their needs are different from the students of formal education system. For the successful and effective results they need proper guidelines and support from the organization and trainer as well. Garrison (1990, p.103) states that, "the majority of distance education is concerned with meeting the educational needs of adults".
Distance learners need to be in touch with the tutor for educational help. To get rid from the isolation they want to develop contacts with peers. Students wish for alternate resources along with study guides.

They desire more interactive ways of communication with instructor and mates other than occasional face to face meetings. Distance learners wish to get latest knowledge to compete with the students of formal education system and to meet the needs of the distance learners the only solution is the usage of growing technology in distance learning system. With the help of advance technology the isolation of the distance learner can be reduced and they can get many other sources for obtaining knowledge. "As resources shrink and learning requirements expand, many educational institutions are relying on communication technologies, such as distance learning, to enhance the effectiveness and efficiency of education" (Ameritech, 1996),

GROWING TECHNOLOGIES IN DISTANCE LEARNING SYSTEM

Technology is a body of knowledge used to create tools, develop skills, and extract or collect materials. It is also the application of science, the combination of the scientific method and material to meet an objective or solve a problem. (http://science.education.nih.gov/supplements/nih4/technology/guide/lesson1.htm)

The field of distance education is changing all over the world that is the result of new developments in the field of science and technologies. These changes will ultimately benefit the students and the education system. Gates (1995) stated that people might fear that technology would "dehumanize" education.

He added that if people could watch students living in different countries and exchanging information across the borders, they might rethink that technology would actually "humanize" education. Gates continued by stating "the same technological forces that will make learning so necessary will also make it practical and enjoyable. Corporations are reinventing themselves around the flexible opportunities afforded by information technology; classrooms will have to change as well.

"According to Online Journal of Distance Learning Administration, "Cetron (2003, p.14) One of the most apparent trends affecting distance education is the advancement of technology. Infrastructures are growing stronger as computers double in speed while decreasing in cost, and high-speed network connections continue to expand. Computer, fax, picture phone, duplication, and other modalities are merging and becoming available at ever cheaper prices.

Further, IT functionalities not imagined ten years ago are being realized. By 2018, computers will be able to "routinely translate languages in real-time with the accuracy and speed necessary for effective communications". McLean stated that by using technological innovation, classrooms around the globe could be connected through satellite, computers, interactive TV, and the Internet. Distance education has gained tremendous recognition for its ability to accept and use new educational technologies, while traditional education has been resistant to change and is not structured to make complete use of the new developments. The computer-based technologies now available for use in educational programs provide current and quality instructional options for teachers and students [Steele1993].

In distance education the use of technology is essential. It is not a supplement. According to Keegan, D. (2008) use of technology in education comprises five major fields:

- **Distance education – the provision of education and training at a distance by Open Universities, distance education institutions and distance education departments of conventional institutions**
- **E-learning – e-learning is the provision of education and training via the WWW for students who study mainly as individuals using LMSs (or VLEs) like SumTotal and Blackboard**
- **Synchronous e-learning systems – these are the provision of education and training on the WWW to students who study mainly in groups using LMSs like Centra or Horizon Wimba**
- **The use of the WWW for the provision of education and training on university and college campuses as a supplement to lectures and ILT given on campus or, alternatively, as a substitute for lectures when the courseware is provided on the WWW in the institution in place of lectures**
- **Mobile learning-the provision of education and training on PDAs (including palmtops and handhelds), smart phones and mobile phones.**

"In the future learning solutions and services will be integrated into mobile technologies as mobile phones, PDAs, digital pen and paper, and in the long term, mobile devices that are not yet on the market.

In the long term, learning solutions and services are also likely to be integrated into electronic appliances, machines and information interfaces. For mobile learning there are two distinct potential markets which are evolving:

The first one is the market of learning services for people that are without infrastructure (accessibility to internet and e-learning may not be as wide spread in rural or remote areas) and learners in developing economies

The second one is the market of learning services for people whose jobs require them to continuously move, people learning and receiving information while visiting various sites and locations, certain types students needing". (Luciana Carabaneanu(1), Romica Trandafir(2), Ion Mierlus-Mazilu(3) *Trends In E-Learning* Department Of Mathematics And Computer Science Technical University Of Civil Engineering Bucharest)

EFFECTS OF GROWING TECHNOLOGIES ON DISTANCE LEARNING SYSTEM

This is the age of technology and it has changed the life style of mankind, almost all aspects of life are affected by it education is not exceptional; especially in the field of distance education the role of advance technology is significant. Before a decade the distance learner was isolated but with the use of advance technology distance can be reduced easily the learners can interact with the tutors and fellows and can get the latest knowledge by using internet.

"Developments in information and communications technology (ICT) throughout the last decade have substantially changed the format of distance education from correspondence-style courses to technologically based courses using the Internet.

The use of various forms of electronic media, e.g., for the submission of assignments and their correction, for performing Internet-based seminars, laboratory experiments and collaborative class activities, has increased time and cost effectiveness and improved the exchange of information.
Interactive computer-based learning applications, instructional animations, video or audio are believed to enhance the quality of learning materials. New methodological approaches to learning in technology-based educational scenarios have been developed, promising a wider range of teaching functions and a higher quality of learning, more interaction and feedback for distant students". www.eadtu.nl/.../R-%20Schulte%20and%20Kraemer%20.Similar

Although technology is advanced, it still has some defects. For example, some teachers and students feel that technology is not fun and convenient for them (Findley & Findley, 1997, Rowntree 1995).

Computers are still expensive for some families although they are cheaper every year (Shimabukuro, 1998). It is easy to be effected by other factors like weather affects the satellites when the distance education conveyed by those.
(Findley & Findley, 1997).

It cannot deliver courses absolutely (Martin & Taylor, 1997). Although so, technology will progress gradually, and it will enable the distance teaching to be more convenient and friendly.

DEMAND OF GROWING TECHNOLOGIES IN DISTANCE LEARNING SYSTEM

All the latest technologies which are made to assist the teaching learning process are the need of the time. Growing technologies cannot be neglected in the field of distance education, because to facilitate the learner is a main requirement of distance education and by using emerging technologies a distance learner can be facilitated in the best way. The usage of different emerging technologies learning procedure may be more flexible, more comfortable and more convenient for both instructor and student. "Web based learning is quickly becoming the education of the future. Learning management systems and mobile devices have allowed learning to move at our busy pace. The pace of change for technologies is much faster than most would understand. One diagram citing the pace of change of the digital infrastructure calculates that computing power doubles every 18 months, communication doubles every 9 months and storage capacity doubles every year. Numerous studies have shown that our online learning capacity is growing at an exponential rate and that we can expect by 2050 to harness the information of every human brain on the planet". (http://www.simplydigi.com/blog).

OBJECTIVES OF THE STUDY WERE TO:

- **Explore the demanding need of growing technologies for distance learners.**
- **Discuses the benefits of growing technologies in distance learning system.**

PROCEDURE OF THE STUDY

Questionnaire was used as instrument for this study; in the questionnaire five point likert scales was developed for collecting the data from the population of the study. Scale value for this table is SA (Strongly Agree) =5, A (Agree) =4, UNC (Uncertain) =3, DA (Disagree) =2 and SDA (Strongly Disagree) =1. For purpose of data collection 205 MS/M.Phil scholars semester spring 2011 and 2012 of AIOU was taken into account. The questionnaire was developed on five point likert scale ranges from strongly agreed to strongly disagree. After the development of research tools, pilot study was conducted on 8 students. There were twenty five statements in the first version. In the light of the feedback seven statements were deleted and three were modified so according to the suggestions of experts final version of the questionnaire with thirteen statements was prepared.

FINDINGS

After tabulating data, result was calculated. Each item of questionnaire was processed and analyzed on the percentage and mean score to interpret the data. And on the basis of these findings conclusions and recommendations were formulated.

Table: 1
Demanding need of growing technologies for distance learners

Statements	SA	A	UNC	DA	SDA	%	Mean
It is need of the student to interact with tutors through latest technology.	105	25	0	0	0	100	4.80
Students wish to connect with fellows via newest gadgets.	81	45	4	0	0	96.9	4.59
Students of distance learning desire alternate digital sources along with the printed books.	79	47	4	0	0	96.9	4.58
Distance learners wish for more interactive ways of communication with tutor and peers other than workshops.	68	52	10	0	0	92.3	4.45
Interconnectivity among students and teachers may be strengthened through advance communication ways.	76	52	2	0	0	98.5	4.57
Distance learners can be up to date by using growing technologies.	92	36	2	0	0	98.5	4.69
It is effective for distance learners of digital age to get knowledge through advance technology.	70	46	10	4	0	89.2	4.40

Table: 1 shows that 100% respondents with mean score 4.80 supported the statement that it is need of the student to interact with tutors through latest technology.

A significant majority (96.9% with mean score 4.59) opined in favour of the statements that students wish to connect with fellows via newest gadgets. Most of the respondent (96.9%with mean score 4.58) agreed that students of distance learning desire alternate digital sources along with the printed books. Majority of the respondents (92.3% with mean score 4.45) agreed that distance learners wish for more interactive ways of communication with tutor and peers other than workshops.98.5% respondents with mean score 4.69 agreed that interconnectivity among students and teachers may be strengthened through advance communication ways.

Majority of the students (98.5% with mean score 4.69) supported the statement that distance learners can be up to date by using growing technologies.

Most of the student (89.2% with mean score 4.40) were on the view that it is effective for distance learners of digital age to get knowledge through advance technology.

Table: 2
Benefits of growing technologies in distance learning system

Statements	SA	A	UNC	DA	SDA	%	Mean
Social networking websites provide friendly communication platform to the distance learners.	64	48	12	4	2	86.1	4.29
For the sake of acquiring latest knowledge internet use is the easiest way.	102	28	0	0	0	100	4.78
Distance learners can easily share and enhance their knowledge with the usage of growing technology.	88	40	2	0	0	98.5	4.66
Through web learning a student study according to his tempo.	76	40	12	2	0	89.3	4.46
Emerging technologies are helpful for better academic achievement.	84	46	0	0	0	100	4.65
Growing technologies can play a vital role to reduce the gape between teachers and taught.	78	52	0	0	0	100	4.60

Table: 2 shows that majority of the respondents (86.1% with mean score 4.29) supported the statement that social networking websites provide friendly communication platform to the distance learners.

All of the respondents were on the view that for the sake of acquiring latest knowledge internet use is the easiest way, emerging technologies are helpful for better academic achievement and growing technologies can play a vital role to reduce the gap between teacher and taught.

A significant majority (98.5% with mean score 4.66) agreed that distance learners can easily share and enhance their knowledge with the usage of growing technology. Most of the respondents (89.3% with mean score 4.46) opinioned in favour of the statement that through web learning a student study according to his tempo.

CONCLUSIONS

In this technological age the next generation cannot work without using digital gadgets and growing technologies. Science and technology is progressing in every passing day and these growing technologies are very much beneficial for the distance education system. Usage of growing technology is the demanding need of the distance learners, and it has many benefits as well as such latest softwares n networks provide opportunity to the learners and the teachers to share their knowledge. They also discuss their problems and get solutions from each others. A learner who is isolated in distance education system get chance to reduce his/her loneliness by using latest technology and there are more chances to be improve academically by using latest ways of acquiring knowledge. Internet, latest softwares, social networking websites, blogs, learning management systems, mobile phones and latest digital gadgets are the growing technologies which are the need and demand of the distance learners and due to their unlimited benefits they are helpful in the distance education system. Growing technologies are helpful for the distance learners to be up to date and the best source to get latest knowledge as well. Now, the distance teaching not only grows fast and attracts much attention but also becomes a trend and will play an important role on education on the 21st Century (Garrison & Onken, 1998, Gross, 1995).

RECOMMENDATIONS

It was recommended that AIOU may take steps to organize a specific website for the MS/M.phil and Ph.D scholars so that they can easily interact with peers and tutors. Social networks like Facebook, Tweeter and LinkedIn may be used for developing better relationships between peers and academicians.

For video conversation Skype may be used. Alert text messaging on cell phones of the students may be started along with the letters. Academicians of education department (AIOU) may use latest technologies and softwares.

For this purpose a comprehensive training programme may be launched to enable the tutors for using new softwares and emerging technologies so that they can facilitate the distance learners. Education department may create the Blogs and Wikis for providing hyperlinks related to the different educational topics. Virtual classrooms can be started along with workshops. Education department can search suitable online educational channels and may be suggested to the students.

Access of digital library may be provided to the distance learners with fast and easy way so that they can easily take help from books and articles for their research work.

Students may adopt growing technologies by using internet and latest softwars, after adopting upcoming trends the isolation of distance learner will be reduced. Academic problems will be decreased and there will be better interaction between learners and tutors as well

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