

TECHNOLOGY IN OPEN AND DISTANCE LEARNING: EXPLORING THE RELEVANCE AND CHALLENGES AHEAD

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Abstract

Open learning system and distance modes are emerging as alternatives of the formal system for spreading education and promoting life-long learning. It has been well realized that education is primarily about learning than about teaching. Thus, learners have occupied a prime position in education today. As far as education with the focus on learners and their learning is concerned ensuring maximum reach of education and its quality becomes most important to fulfil those objectives education is striving for. Present time is an age of technology. Technology has provided a new way of processing and distributing information. Almost all the spheres of human life have been affected by the present technology boom. Education is not an exception. Technology has provided a great aid in increasing the quality of teaching-learning in Open and Distance Learning System, its reach to the unreached section of society and has also exhibited ways and means for life-long learning. Though, technology has immense potentials to improve the quality of distance education in terms of its execution yet there are many challenges and issues persisting in effective use of technology in ODL system. Therefore, an attempt has been made in the paper to highlight the need and relevance of the use of technology in ODL system. The paper would mainly focus upon technological media which are being used in ODL system, media which can be used in ODL system and on existing issues and challenges in utilizing technology to its full extent for the benefit of the learners. The paper would also try to suggest measures for ensuring effective use of technology in ODL system.

Introduction

In confronting many challenges that the future hold in store, humankind sees education as an indispensable asset in attempt to attain the ideas of peace, freedom and social justice. Education has a fundamental role to play in personal and social development. It is a principal means for fostering a deeper and more harmonious form of human development (*Learning: The Treasure Within, 1996*). Therefore, quality education that holds the potential of fostering Learning to Know, Learning to Do, Learning to Live Together, and Learning to be should reach to all. Open and Distance Learning (ODL) System has extended the reach of education for laying sound foundation of future growth and development due to its flexible nature and ability to effectively address the critical challenges such as access, equity, cost, quality relevance and need to meet the demand for lifelong learning.

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Open and Distance Learning: Its Scope and Relevance

Open learning system and distance learning modes are emerging as alternatives to the formal learning system of education. They have proved effective not only for spreading education, but also in dissemination of ideas, removing educational obsolescence and inequality, upgradation of knowledge, professional and vocational skills and helping in the process of life-long learning. Open and distance learning (ODL), in contrast to the formal system of education has brought the control of learning in the hands of learners. Flexibility is the major feature of ODL system. It has grown beyond the boundaries and limitations under which the formal education system is operating. It has offered choices and convenience to the learners. In an ODL system, learners are provided with choices in admission i.e. ODL universities are now offering admissions throughout the year in different courses. Even the process of assessment and evaluation has been made flexible, now learners can choose the convenient time and dates to give examination. ODL system has shredded the limits of age, entry qualification etc. ODL system has brought education in reach of those who could not become the part of formal system of education for many reasons such as adult learners, working children, persons with physical and cognitive challenges, women and those who are living in tough geographical conditions. It is because of the fact that ODL system does not operate under restrictions in terms of time bound targets to be fulfilled both by teachers and learners, necessity of face to face contact between teachers and taught, rigid curriculum etc. It provides directions, ways and means to learn. Learner can choose the time for learning, suitable manner to learn and learning style(s) which suit(s) to their individual needs. Moreover, ODL system provides an ample scope for self-evaluation of their learning. In other words, ODL system constructs a learning environment. Thus, clear influence of constructivist learning principles can be seen in the changing face of ODL system.

The transformation of ODL system for enhancing its quality can be attributed largely to technological interventions in ODL system. Technology has provided wheels to ODL system to function effectively and to make it open in true sense. By the use of technology physical distance between teachers and taught in ODL system has been reduced to a great extent.

Implications of Technological Advances In ODI System

Open and Distance Learning Institutions would have to address following issues in future (*Khan, 2000*):

- Students volumes and economics,
- Demand for more choice and autonomy by learners,
- Explosion of knowledge and technology
- Universalization of education,
- Interdependence
- Mobility of people`

These can also be seen in terms of future opportunities for ODL system which can only be availed by increasing the efficiency, effectiveness and quality in operations of ODL system. These opportunities can be well availed by effective convergence of technology with ODL system. The convergence of technology with distance learning system has resulted in an unprecedented increase in the capacity of ODL system to generate, store, retrieve and distribute knowledge anywhere anytime. The educational implications of technological advancements, particularly in the context of open and distance learning, would include (*Khan1997*):

- Time, space and socio-economic factors which no longer would remain major barriers to learning,
- Decentralized nature of the new technological developments frees learners from technology provider,
- Learners' access to variety of learning resources,
- Up-to-date information from the most authoritative and reliable sources drawn from any part of the world,
- New media that allows more interactivity (learners need not be a passive recipient of knowledge), and
- New technology that allows the learners to receive information in a variety of formats.

The new technological interventions have made learning a highly individualized experience. Concomitant with individualization allows for growing autonomy of learners. The flexibility of ODL methodologies is the key factor in their emergence as the primary mode for life-long learning. Also, "learning to learn" using new technologies or, in other words, building techno-literacy can help to build the confidence to use the technology as a tool to further the learning experience even without the mediation of a learning institutions (*Khan, 1999*).

The classical distance education programmes did not rely much on technology. However, as the time progressed, a shift in distance education from using simple technological interventions like relying mainly on printed materials towards more refine forms of technological initiatives can be seen such as - use of radio, television, computers, mobiles etc. Interactivity is an added feature in technological usage. Radio-counselling, tele-conferencing, blogging, podcasting, virtual classrooms, web-based conferencing, discussion forums etc. are the new trends where there is an ample scope of teacher to student interactivity, peer to peer interactivity or interactivity between the giving and receiving end. The usage of these technological advancements in ODL system are not only making it efficient, but also showing a sharp improvement in the quality of output.

Barriers In Using Technology In ODL System

There are various factors which influence the adoption and usage of technology in education, more specifically in Open and Distance Learning System. These factors can be seen as barriers in availing maximum benefits from the use of technology.

They are operating at different levels i.e. at fundamental level and at execution or being more specific at educational level.

Fundamental Barriers – These can be listed as follows:

- **Technology - Availability** of Many studies have revealed that technology itself is a barrier in its growth, for instance, lack of regular flow of electricity can make technology defunct. One of the major reasons of underutilization of the television programmes in the villages during the Satellite Instructional Television experiments (SITE) and the Indian National Satellite (INSAT) project was irregular supply of electricity (*Mahajan, 2002*).
- **Availability of Suitable Infrastructure** – *For full utilization of technology* availability of suitable infrastructure should be ensured. For instance, tele-conferencing sessions requires students to be presented at regional centres where the infrastructure facilities are available to facilitate interaction between students and experts. But, students seldom reach to regional centres and the result is that these sessions last without any significant teaching-learning outcome. Similarly, IGNOU provides facilities for connecting listeners of radio- counselling programmes or other educational programmes by dialling toll-free numbers. Though, the cost for reaching to resource person(s) is reduced through this facility but what if there are no telephone facilities or connections. Similar is the case with computers. Computer as an aid in education is functioning mainly through internet facilities and in many parts of India where there is no power supply expecting internet facility is a dream. So, all the efforts for utilizing technology to enhance the reach and quality of education get limited.
- **Technical Expertise** – **Not every expected beneficiary** or those who are involved in imparting educational experiences through technological usage possess sufficient skills and technical expertise required to utilize technological assistance as an aid for learning or teaching. For example using internet requires sophisticated skills in computing which are usually absent in learners who are from diverse background and are not having any prior exposure to these facilities. As an outcome, the whole purpose of ODL system of reaching learners through technology defeats.
- **Appropriateness - Use of technology** should suit the needs of the learners. Open and distance learning system is dealing with learners having diversified needs due to their different socio-economic background or geographical conditions etc. Usage of technology should be adapted according to their need which is somehow missing.
- **Accessibility** – **Certain constraints** like lack of money, lack of sufficient software/courseware etc. are invariably affecting the accessibility of technology to educational sector.
- **Handling** – **Computers** need specialized operators and programmers to use them. More so, because technologies are changing so fast that one finds it difficult to keep oneself up to date in handling and maintaining them.

- **Maintenance – Poor or inappropriate** maintenance of various technologies imported or adopted, due to different reasons such as lack of expertise or availability of spare-parts etc., can also be seen as a hindrance in utilizing their capacities fully. Reasons are many
- **Software/Courseware – There is a dearth of** relevant software/courseware for educational sector all over the world, including the developing countries. India is not an exception of that.

Educational Barriers

There are certain educational factors that influence the growth and adoption of technology in education. These may range from curriculum to teachers' attitude to quality of programmes etc.

- The present **Curriculum** requires various adaptations and change in orientation for making it suitable to get transacted with the help of technology.
- **Lack of orientation** amongst executors i.e. teachers and amongst students **for using technology** efficiently and effectively is again defeating the purpose of using technology to increase the quality of teaching-learning in ODL system and limiting its access. Development of skills of teachers, students and executors in technological ways and means is important before relying on these for enhancing the quality of teaching-learning in ODL system.
- **Combination of technological media** in ODL system for the purpose of teaching and learning is crucial as far as quality of teaching-learning in ODL system is concerned. Generally, ODL institutions rely on single technological medium for covering the entire syllabus which reduces the impact of that medium and may reduce the interest and motivation of learners. Various factors such as - demand for more financial resources make it difficult to adopt multimedia approach. However some ODL institutions, such as IGNOU, are experimenting well with multimedia approach in teaching-learning and marking improved quality of output.
- **Lack of effective goals** for technological use and **Lack of suitable mechanism** for feedback on the progress towards these goals are also reducing the quality of effect of technology in education. In absence of definite and measurable goals delivery becomes important without bothering about its impact.
- **Needs of learners** are often been ignored while designing and implementing programmes through various technological ways and means such as - telecast time or airing time of T.V. and radio programmes is decided by the institution which seldom keeps in consideration various factors say geographical conditions or reach of media in different targeted regions. Moreover, the topics to be delivered through T.V. or Radio programmes are often selected by

teachers/executors well in advance without any scope of further change and students have no choice to convey their own needs on the basis of difficulties they are facing while studying. Schedule of these programmes is also sometimes unknown to the target groups of learners.

- Educational programmes on radio and television are **non-motivational** in nature and also **lack majorly in generating the interest of learners**.
- Executors or teachers are often not the developers of the courseware or software. So, the assurance that whether these technical assistance would fully suit to educational purposes reduces.
- **Lack of preparation of teachers** to use technological means effectively in education is also a hindrance, for instance teachers in higher education often do not possess requisite skills to use interactive forums such as portals, blogs etc. lack of motivation can be seen as potent reason for the present situation.

Some Suggestions to Deal With The Situation

There are certain questions which have to be answered before technology is brought in such as – how to make technology user oriented, contextual? Should technology go hand in hand with traditional means? What are the means to identify the role of technology in ODL, which could be a channel to reduce space, time and economic barriers in the context of education? Should there be any provision for developing technical skills before introducing technology in education? Whether the use of technology can be adopted in the situations where proper infrastructure is not available? Is it cost effective to use technology? These questions may find answer if we work on -

- Developing and strengthening infrastructure,
- Building capacities of teachers in using technology effectively,
- Building research base on needs, requirements and expectations of students,
- Promoting coordination and cooperation amongst different functionaries involved,
- Intimating the schedule of programmes to students well in advance and ensure the presence of students by relating it to grades in examination,
- As study centres work more closely with students building their capacity and providing technological facilities there would enhance the reach of benefits of use of technology in ODL system.

Conclusion

Much of the future will undoubtedly be decided by our own response to the new technology. If its existence is ignored it will unquestionably destroy the value and growth of education and more particularly ODL system. If technology is being embraced and exploited for its full capacity, it would help in fulfilling the aspired goals and objectives of ODL system. But, feasibility, cost-effectiveness, practicality and meeting students' needs should form the basis for adopting and utilizing technology for educational purposes.

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