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## ICT TOWARDS ENSURING DISTANCE LEARNING PROGRAM

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**ABSTRACT**

*Distance Education is that form of education in which learners can learn their lesson without being present physically or mentally in a formal classroom. ICT in Distance Education facilitates all the learners worldwide to improve their potentialities without any direct face- to-face communication among the teachers or instructor and learners. Ministry of Human Resource Development, India, has introduced various online courses aiming at unlimited participation and open access via the web such as MOOCs, e- Pathshala, SWAYAM, Moodle, AAKASH project, E-PG-Pathshala etc. These facilities insist a learner to complete their education by distance mode, which is free from the limitation of exact time, fixed age, attendance etc and to decrease the rates of drop outs. The present paper focuses on, how ICT is becoming the engine to ensure the possibilities of Distance Education gradually.*

**KEY WORDS:** *MOOCs, Moodle, e- Pathshala, SWAYAM, AKASH Project.*

## INTRODUCTION

In this era of 21st century, where the world is going to be a digital world; Information & Communication Technology (ICT) becomes a compulsory component in every sector of modern education. Today's society has entered into the age of a new social revolution, i.e. 'information revolution'. 21st century has witnessed the explosion of information technologies. Generally, ICTs allow teachers to employ various strategies which enhance learners' interest. Onyekwe (2006) saw ICT as a broad based electronic technology that is used for collecting, storing, processing and transmitting information in various forms in a specific environment- Distance Education is not the exception. ICT in Distance Education facilitates all learners to improve their possibilities, become up-to-date and prepare them properly for their academic achievement. The application of new technologies in the distance education context provides an appropriate starting point for the construction and application of knowledge for the learners.

Indian govt. is providing free education, free books, free dress, free mid day meal, scholarships etc. to ensure Education for All, But it's not so easy to educate all the students in a formal way. Distance Education can meet this inadequacy regarding education. It is a form of education which facilitates a student to be educated in anywhere and anytime without being present in a particular classroom, the student and instructor are separated by place, and sometimes by time. Due to the rapid development of technology, courses using a variety of media are being delivered to students in various locations in an effort to fulfil the educational needs of growing populations. Distance Education refers to those form of education in which, there is no face-to-face communication between the learners and teachers. In that case, ICT can fulfil the demands of learners by providing them sufficient information about their different needs and balance the absence of a teacher in a particular classroom. ICT is a powerful resource to serve education in distance

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mode. It should be integrated in Distance Education so that the teaching-learning process can become more interesting, easy and effective for the betterment of the students.

### ICT in Distance Education: a tool for ameliorating the scope of education:

Distance Education minimises the different constrains regarding education such as time, pace, place, accessibility etc so that everyone can get opportunities to learn himself/herself.  With the advancement in communication technology a variety of audio-visual media-radio, television broadcast, video cassettes, video compact disc, video text, CD, computer and other innovative techniques are used for effective transmission of knowledge to the learners at a distance and open learning system . ICT in Distance Education ameliorates and enriches the scope of education. The modern technologies used in open and distance learning are telephone tutoring, teleconferencing, audio graphics, video conferencing, computer conferencing drill and practice, teletext, and videotext, multimedia and hypermedia CAI, e-books, the "Internet", the World Wide Web (WWW), or the "Information Super Highway" on-line database, on line discussion, call-in course- on demand, satellite, talk-back TV etc. All of these technologies should have a place in the knowledge base of expert teachers. A potentially useful framework for organizing such a knowledge base is provided by the emergence of different generations of distance education (Taylor, 1995). Distance Education refers to a teaching learning system where learner is separated from teacher as well as peer group. Research shows that ICT enabled education has a positive impact on teachers and learners. Distance Education is enriching itself rapidly through the evolution of communication technologies, which provides a enormous opportunity to learn. Technology becomes the mediation for Distance Education. Pallof & Pratt says about this: The technology serves as a vehicle through which the course is conducted. The students' social interaction in the context of the online course forms the foundation of the learning community. The purpose is the shared involvement in the online course itself. Sharing information, interests, and resources are part of what online education is about. The roles and functions of the distance educator will differ in compare to the roles and functions of a lecturer or teacher at a campus-based formal classroom. Our 21$^{st}$ century is characterised by the prominent use of Information and Communication Technology, which ensure the successful execution of education through distance mode so that all can take benefit to learn.

### Endeavour of Indian Government:

Ministry of Human Resource Development of India has introduced various online courses under its National Mission on Education through ICT (NME- ICT) such as AAKASH, SWAYAM, MOOCs, e- Pathshala, and Moodle etc. The ultimate aim was to ensure the participation & engagement of maximum students in the field of education by including them irrespective of their class, socio-economic status, age, place etc.

### i. SWAYAM Project:

The project 'Study Webs of Active Learning for Young Aspiring Minds' (SWAYAM) has been started to access the best quality learning resources throughout  the country. It provides an integrated platform for online courses, using Information and Communication Technology (ICT) to ensure benefits for every student in providing learning material through ICT. The Union Cabinet chaired by the Prime Minister, Shri Narendra Modi, gave its approval for signing of a Joint Declaration of Intent between the Ministry of Human Resource Development (MHRD) and the U.S. Department of State for cooperation in the field of higher education for Study Webs of Active-earning for Young Aspiring Minds (SWAYAM), a programme for online education.

### ii. AAKASH Project:

AAKASH is another project taken by govt. of India to extend the scope of education through the use of ICT. The MHRD announced the launch of a new low cost educational tablet, the "*Aakash"*, Developed by the London-based company; the Aakash has been described by some as a new potentially heralding 'Internet revolution' within India education, doing for educational computing what the mobile phone has done for

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personal communications over the past decade. According to Hindusthan Times (July 12, 2015), the Aakash Project at IIT Bombay was closed on 31st March, 2015, after successfully completing all targets.

### iii. MOOCs:

NCERT has been working to develop a platform for launching of Massive Open and Online Courses (MOOCs) for school education system. For this purpose the new interface of National Repository of Open Educational Resources (NROER) has been designed to offer such courses. In all 85 course modules have been developed for launching online courses in various subject areas at secondary level (classes IX and X). MOOCs are just a spice among many online-education spices, related to Information and Communication Technologies (ICTs) which are potentially powerful enabling tools for educational changes and reforms. In this, no formal entrance is required and learners' participation is also free. Thousands of users can take benefit by this through entirely online system. Students can help to educate each other, as well as computerized assignments and assessments by MOOCs with the use of social networking tools. MOOCs use Web-based tools to deliver education and classes in a new paradigm without any bound of geographic boundaries and time zones.

### iv. e- Pathshala:

The e-Pathshala, a joint initiative of Ministry of Human Resource Development (MHRD), Govt. of India and National Council of Educational Research and Training (NCERT) has been developed for showcasing and disseminating all educational e-resources including textbooks, audio, video, periodicals and a variety of other print and non-print materials. Students, teachers, educators and parents can access e-books through multiple technology platforms i.e. mobile phones, and tablets (as e-pub) and on web through laptops and desktops (as flipbooks). This e-Pathshala also allows it users to carry as many books as their device support. Features of these books allow users to select, read, zoom, bookmark, highlight, navigate, share and make notes digitally.

### v. Moodle:

Moodle is an effective tool for Distance Education through ICT. Pearson states that Moodle is undoubtedly an excellent tool to support online communities in which participants can easily communicate with each other synchronously and asynchronously. In this way, teachers can easily share their materials online and establish good rapport with other colleagues and students.

### vi. E-PG-Pathshala:

Central Institute of Educational Technology (CIET) has been working for the development of e-texts and video modules for PG courses in Education under UGC sponsored project in collaboration with Allahabad University. In all 150 e-text modules and 125 video programmes have been developed under this initiative which will be soon available for dissemination.

### ICT & Distance Education- in contemporary India:

Due to unavailability of sufficient human resource, it is difficult to provide various services to the participants at different phases of a student learning life cycle. Information and Communication Technology (ICT) is a prime resource to overcome this limitation through Distance Learning. Distance learning requires ICT infrastructure to provide various services effectively to all the learners. With the advancement in ICT and its increasing accessibility in Distance Education, learners' community is now moving towards digital learning rapidly. At present, ODL system in India consists of Open Universities (OUs), Institutions and Universities offering Distance Education and also includes Correspondence Course Institutes (CCIs) in conventional dual mode universities. India is a developing country. Here, availability and access of ICT and learner characteristics are not smooth and vary from state to state. Among the Open Universities(OUs) in India, Indira Gandhi National Open University (IGNOU) is the largest and leading Open University. IGNOU deals

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with more than two million students in India and abroad. IGNOU has adopted various ICT tools such as radio, television, Tele-conferencing, compact discs (CDs) and web-based content to cater to students. Regular mail is used to send written materials, videos, audiotapes and CD-ROMs to the learners and to turn in their exercises. At this point in time, e-mail, the web and video conferencing, over broadband network connections are also used in learning through distance mode.

### Technology and Distance Education- An Important Role in Teaching-Learning Process:

Distance Education follows the evolution of the communication technologies. The development of new technologies helps to ensure the learning of learners as much as possible by facilitating them in different ways about their learning. Distance learning requires ICT infrastructure for providing various services successfully at different phases of learning. It includes the network infrastructure, the computing infrastructure, the system and application software, the Internet Service Provider (ISP), the security infrastructure etc. ICT provides more flexibility while accessing distance education programme, it is a major factor to shape our global modernized world. ICT in Distance Learning helps both learners and instructors in teaching and learning process; it is the key to serve education to all. The instructor may try to use mailed assignment marking, emails, telephone, Tele -and video-conferencing, radio or TV, as well as pre-recorded video or audio materials. As example we can say that, Video conferencing facility helps the isolated learners in their learning and development. ICTs help learners in distance education system in various ways which make them involved in teaching learning system because here, the learners are not engaged directly with day to day classroom situation. IGNOU (Indira Gandhi National Open University) provides us multi-channel and multi-media teaching learning packages for learning and instruction. ICTs provide various tools and techniques to meet the requirements and expectations of the learners; it acts as a support service to make the learners satisfied to the highest level. These all are used for various issues such as presentation, demonstration etc.

### CONCLUSION:

The key aim of education is human resource development; everyone should be learned as per their criteria. National development is possible only if education for all can be implemented properly. Distance Education plays a vital role for this successful achievement, and ICT plays a decisive role to ensure and enrich the Distance Education Program so that every student can access the learning at anywhere and anytime. The world is going to be a digital world; learners should be updated and upgraded as per the needs and demands of this modern world of technology. But there are many issues and challenges that are to be addressed for smooth functioning of various online services, implemented for its learners and other public. Distance Education gives more opportunities to rural and urban working population. This enhances the standards of life of these sections and enriches the education system. The awareness of Media and Technology should be given primarily and motivate all the stake holders of Distance Education to adopt it as much as possible. So, we should try to improve the present status of ICT with the proper cooperation of the Government to make the field of Distance Education open to all. It helps to make the students interested and motivated in regard to their learning. Thus, finally, we can make a literate world.

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