

Distance Education: Challenges from Distance Education to Online Education

Dr. Sanjib Kr. Kalita

1. Introduction

Distance education is a process of learning remotely without being in regular face-to-face contact with a teacher in the classroom. It provides a wide range of contributions and reforms in the higher educational sectors that supports flexibility to the learner with reference to entry and exit, pace and place of study, method of study and the choice and combination of courses, assessment and course completion. The aim of distance education is to help the socially or economically backward person by offering opportunities not provided by conventional colleges or universities. At present there are mainly two similar terms used in distance learning inter-changeably—"Distance Learning" and "Online Education." Distance learning is mostly based on geographical location, while online learning is based on technology beyond geography. Distance learning is a key term that describes all the teaching learning process without direct help of the teachers. In fact, it is a process of delivering education and instructions to learners who are not physically present in a traditional setting of a classroom. Curriculum is communicated to the learners through specially designed materials (Self Learning Study Materials) and distributed through different media such print, television, radio, satellite, audio/video tapes, CD-ROMs, Internet, World Wide Web, etc.

The major objectives of DE system are [1]:

- To spread higher education to large section of the society such as those living in remote and rural areas, working people, physically challenged etc.
- To provide a flexible system of university-level education in terms of methods and pace of learning, eligibility criteria for enrollment, age of entry, conduct of examination and implementation of the programmes of study.
- To provide an opportunity for upgradation of skills and qualifications

- To develop education as a lifelong activity to enable people or aspiring learners update their knowledge or acquire knowledge in new areas.

In the field of distance education, India is one of the leading countries in the world. There are six types of institutions offering distance education in India:

- National Open University
- State Open Universities
- Distance Education Institutions (DEIs) at-- Institutions of National Importance - Central Universities.
- State Universities
- Deemed Universities
- State Private Universities

With the increasing population in India, the demand for higher education is increasing exponentially. The University Grants Commission (UGC) has suggested in 1960 for introducing correspondence education and award of degrees. Accordingly, the Planning Commission in its Third Five Year Plan mentioned the need for the introduction of correspondence education in India. On recommendation of the Planning Commission, the Central Advisory Board on Education decided to set up an Expert Committee under the chairmanship of Dr. D. S. Kothari, former Chairman of UGC. The Expert Committee has recommended to set up institute of correspondence education in the country. The committee has suggested that correspondence education in India should be conducted by the universities. In view of Dr. D. S. Kothari report and UGC recommendation, the following schools of corresponding education have been started in India as depicted in **Table 1**.

Table 1: Distance Education Institute in India (only few)

S l No	Year	Distance Education Institute
1	1962	University of Delhi, School of Correspondence Courses and Continuing Education
2	1970	Conventional universities opening Correspondence Course Institutes
3	1982	Dr BR Ambedkar Open University, Hyderabad (First Open University)
4	1985	Indira Gandhi National Open University

5	1987	Nalanda Open University (NOU) Patna, Bihar and Vardhman Mahaveer Open University (VMOU), Kota, Rajasthan
6	1989	Yashwantrao Chavan Maharashtra Open University (YCMOU), Nashik, Maharashtra
7	1991	Madhya Pradesh Bhoj Open University (MPBOU), Bhopal
8	1994	Dr. Babasaheb Ambedkar Open University (BAOU), Ahmedabad
9	1996	Karnataka State Open University (KSOU), Mysore
10	1997	Netaji Subhas Open University (NSOU), Kolkata
11	1999	UP Rajarshi Tandon Open University (UPRTOU), Allahabad
12	2002	Tamil Nadu Open University (TNOU), Chennai
13	2005	Pt. sundarlal sharma Open University (PSSOU), Bilaspur
14	2005	Uttarakhand Open University, Haldwani (Nainital)
15	2005	Krishna Kanta Handiqui State Open University, Guwahati

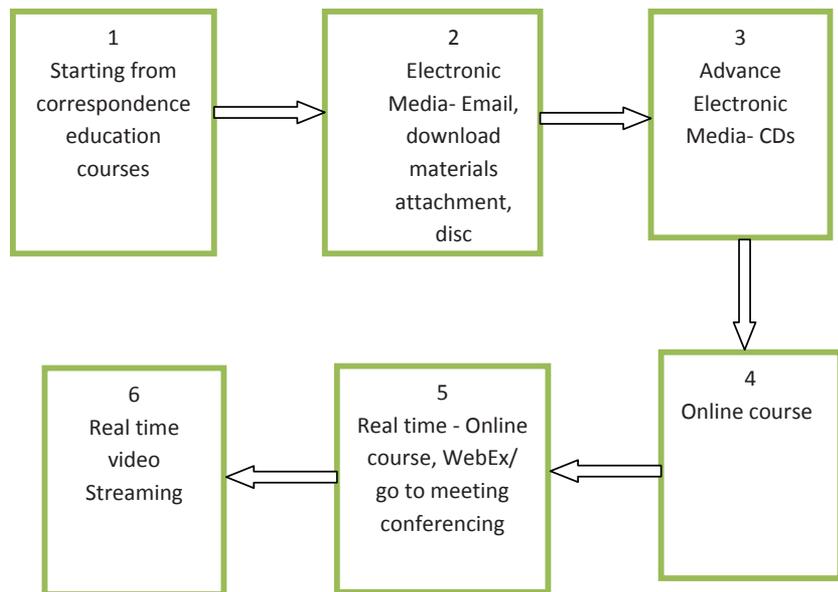
To formulate the guidelines for open and distance education, the Parliament entrusted Indira Gandhi National Open University (IGNOU) as nodal agency. To regulate the distance learning education IGNOU has set up a council called Distance Education Council (DEC) in 1991. The council has been working since February 1992. The Distance Education Council (DEC) prepared guidelines for establishment, promotion, coordination and maintenance of open and distance education system in the country. In August 2010, the Ministry of Human Resource Development constituted a Committee under the Chairmanship of Prof. Madhava Menon to monitor the standards of education delivered through distance mode. Subsequently, Madhava Menon Committee has submitted a report to the Ministry of Human Resource Development (MHRD) for creation of a new regulatory body for ODL system. Accordingly the Distance Education Council of India (DECI) has been set up. The Madhava Menon Committee also suggested that the DEC of IGNOU may be shifted to UGC. Subsequently, the MHRD issued an order, dated 29 December 2012, to transfer the Distance Education Council from IGNOU to UGC.

2. Evolution

Distance education in India has been running based on a series of different ways. These techniques have been depicted in **Fig. 1**. The advances in communication and electronic technology have gradually changed the distance education mode from offline. Evidently, online education operated into two modes–(a) Certificate oriented, (b) Credit oriented. The first form of online education consists of professional

training and certification preparation. Such online learning is usually targeted for professionals or students seeking training or preparing for certification exams. Popular courses include training in Information Technology, Engineering, Medical Science, Social Science, Foreign Languages, Accounting and Nursing, etc. The second form of online learning deals with credit courses where learners enrolled in tertiary education take online classes offered by higher education learning institutions for credit. Some well-known examples include the MIT Open Course Ware and the Harvard Online learning.

Fig. 1: Evolution of Distance and Online Courses.



3. Advantages of Online Courses:

Scalability: The intake capacity of online classroom is almost unlimited.

Optimal resource utilization: Imagine a Nobel Laureate delivering a lecture at a face-to-face classroom. In a classroom teaching, a limited number of students can participate in the lecture, which leads to the misuse of resources. However, the participation level could be increased through online courses.

Self-paced: Literature review reveals that people have different learning styles and pick up new concepts at varying paces. Self-paced courses allow one to study and learn at their own leisurely rate.

Removal of financial constraints: Not everybody in the world is privileged enough or do not have sufficient financial empowerment for higher studies. People currently in the work force have very few options for pursuing their academic interests that fit into their work-schedule.

4. Distance and Online Education Scenario in the World

Due to the popularity of online education, a large number of world top ranking higher education institutes have opened online courses. Some of them are stated below.

Harvard University: It offers 11 different online Degrees courses such as Biomedical Engineering, Fine & Studio Arts, General English Literature, General Psychology, General Social Sciences, History, Liberal Arts General Studies, Natural Resources Conservation, Natural Sciences, Political Science & Government, and Religious Studies. Literature review reveals that out of total students currently enrolled at Harvard University; about 7.6% have participated in some form of distance or online learning.

Stanford University: It offers a variety of degree and certificate programme in association with many of the University's Schools and Departments. Stanford University also delivers corporate education programmes fully online, on-campus at company work sites, and even through a combination of methods (blended courses). Last year, a Computer Science professor, Sebastian, with his Stanford colleagues had decided to open their classes to the world. They would allow anyone, anywhere to attend online, take quizzes, ask questions and even get grades for free. They have claimed that around 5,000 students have signed up the registration process within an hour. The total registration went up to 10,000 students, the next night.

Boston University: Being one of the largest non-profit universities in the United States, Boston University managed to develop a reliable online learning environment for higher education.

University of Florida: It is one of the top 20 American public universities. It offers both undergraduate and graduate programmes through ODL mode in diverse fields like Agriculture, Engineering, Pharmacy, Business Administration etc.

Arizona State University: The University was ranked by U.S. News and World Report as one of the most innovative schools in student support services. Arizona State University Online offers almost 100

Bachelor's and Master's Degree Programme in various fields of business, social sciences, public and medical services.

University of Wisconsin-Madison: There is a wide array of study choices with diverse undergraduate programmes, Master's programmes, and many more non-degree certificate programmes. The University of Wisconsin earned an honor roll distinction from the US News top online education programmes ranking for its Master's in engineering programmes.

University of California: University of California has introduced the Berkeley Resource Centre for Online Education (BRCOE) in 2012. This Centre coordinates and facilitates the online education initiatives for credit and non-credit courses.

Washington State University: The University created its online Global Campus in 2012, aiming to bring its academic programmes to a wider audience. WSU Global Campus is a user-friendly platform, where students can find both the degree and non-degree certificates.

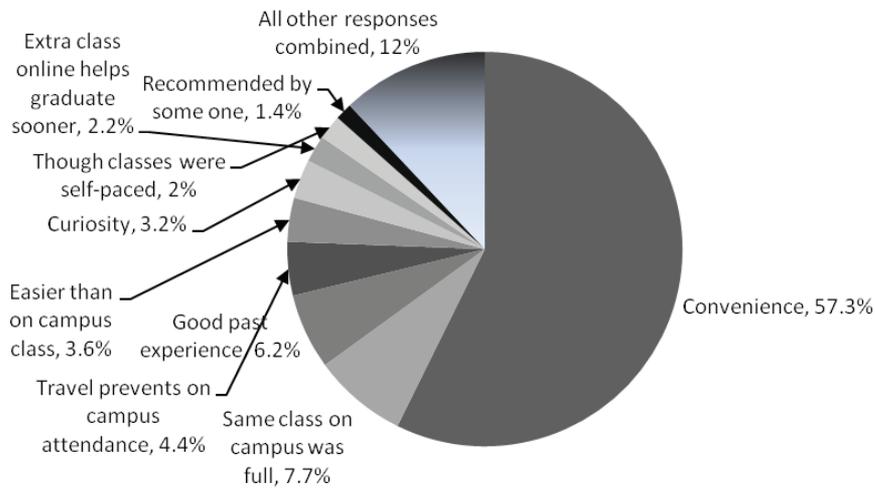
According to Distance Education Enrollment Report 2017, the number of online learners in USA has increased every year. On the other hand, the conventional learner has been decreasing gradually. The report claimed that

- The number of higher education learners taking at least one distance education course topped 6 million in 2015.
- A year-to-year increase of 226,375 distance education learners represents a 3.9 % increase over the previous two years.
- More than one in four learners (29.7%) now take at least one distance education course (a total of 6,022,105 learners).
- Public institutions enroll the largest portion of distance education learners, with 67.8% of all distance learners.
- Large enrollment drops among for-profit institutions were driven by a few of the largest institutions; the majority of for-profits grew their distance enrollments.
- The number of students studying on a campus has dropped by almost one million (931,317), between 2012 and 2015.
- Last year, the e-learning market was worth an enormous \$166.5 billion. It has been estimated that this will grow to \$255 billion by 2017.

- In the latest Global Shapers Survey of 25,000 young people from across the world, 77.84 % of respondents reported having taken online courses in the past. Now, question arises if online learning is the future of education.
- On quality question, 40.56% of respondents in the Global Shapers Survey said online education is as strong as traditional learning in a classroom.

The popularity of online education among the learners is due to varied reasons. Category wise breakup according to Distance Education Enrollment Report 2017 has been depicted in Figure 2.

Fig 2: Online and distance education in USA



5. Challenges:

Distance and open learning education faces a large number of challenges in view of the present state of the art technology. Some of them are:

- a. Quality
- b. Massive Open Online Courses (MOOC)
- c. Big Data
- d. Security

a. Quality: It is an admissible fact that a large section of people in the globe has a question regarding the academic quality of distance and online learner.

- b. MOOCs:** In the past few years, the distance education market has gained new attention with a new term known as **MOOCs** (Massive Open Online Courses). MOOCs is basically one form of online learning platform started in 2007 [4]. Companies like Coursera or Udacity are the leading agency for running MOOCs. Many Indian students have enrolled into foreign universities through Coursera, which is a major player in the MOOCs sector. It has procured the second highest enrollments from India [4].
- c. Big Data:** Another problem in the Information Technology field is the problem of big data. Data in different forms like text, audio, image, video, etc are generated through different electronic media like keyboard, microphone, camera, etc. and stored in computer memory. In every second several tera bytes of data are stored in the memory and shared on the internet. The problem of proper management of these voluminous data is known as big data problem, which is a current research topic in the IT field.
- d. Security:** Data security is the one of the primary concerns of every organization. The loss of hardware can be replaced but the loss of electronic data cannot be replaced. It is necessary to implement proper technology for the security of data.

6. Conclusion:

Undoubtedly, with the even wider spread of technology and deepening of the global mandate of education for all, distance and online education's potential to become complementary – or in some cases alternatives – to traditional education cannot be overlooked. At present, UGC have also started online education in India. A lot of efforts have been made in this regard.

References:

1. <https://www.ugc.ac.in/deb/pdf/ODLwhatwhyandhow.pdf>
2. <http://www.mastersportal.eu/rankings/1/world-university-rankings-times-higher-education.html>
3. Distance Education Enrollment Report 2017, Digital Learning Compass, in partnership with OLC, Pearson and Tyton Partners.
4. Devgun, P. (2013). Prospects for Success of MOOC in Higher Education in India. *International Journal of Information and Computation Technology*. ISSN 0974-2239 Volume 3, Number 7. pp. 641-646(2014)