

## Online Programme in Higher Education in India: Challenges and Opportunities

Dr. Sintu Ganai

Assistant Professor in Chemistry

Netaji Subhas Open University

E-mail: sintuganai.sosc@wbnsou.ac.in

### Abstract

The world has realized that the economic success of the states is directly determined by their education systems. Education is a Nation's Strength. A developed nation is inevitably an educated nation. Since independence, India as a developing nation is continuously progressing in the education field. Although there have been lot of challenges to higher education system of India but equally have lot of opportunities to overcome these challenges and to make higher education system much better. India need well skilled and highly educated people who can drive our economy forward. The current study aims to highlight the challenges and to point out the opportunities and challenges in online programme in higher education system in India. Online education changes all components of teaching and learning in higher education. Three major categories of findings were identified: issues related to online learners, instructors, and content development. To address these challenges in online education, higher education institutions need to provide professional development for instructors, trainings for learners, and technical support for content development. Here we will discuss some suggestions to improve the Higher Education system.

**Keywords:** Online Education, distance education, SWAYAM, NPTEL, NDL, MOOCs, Multimedia, tele-learning,

### Introduction

Today, Knowledge is power. The more knowledge one has, the more powerful one is. India's higher education system is the world's third largest in terms of students, next to China and the United States. Despite growing investment in education, 25% of its population is still illiterate; only 15% of Indian students reach high school, and just 7% graduate<sup>1</sup>. The quality of education in India whether at primary or higher education is significantly poor as compared to major developing nations of the world. As of 2008, India's post-secondary institutions offer only enough seats for 7 % of India's college-age population, 25 % of teaching positions nationwide are vacant, and 57 % of college professors lack either a master's or PhD degree<sup>2</sup>. However, these institutions face

shortage of faculty and concerns have been raised over the quality of education<sup>3</sup>. Apart from this different ODL institutions play a vital role in providing higher education in India. With fresh enrolment in ODL programmes at approximately 40 lakhs annually, the share of distance education in the GER is about 22-23% of the total number of students in the higher education of the country, which is significant<sup>4</sup>. Despite these challenges higher education system of India equally has lot of opportunities to overcome these challenges and have the capability to make its identity at international level. However, it needs greater transparency and accountability, the role of universities and colleges in the new millennium, and emerging scientific research on how people learn is of utmost important.

### Status of Higher Education Sector in India

India has always been a land of scholars and learners. In ancient times also, India was regarded all over the world for its universities like Taxila, Nalanda, Vikramshila and its scholars. By independence India had 20 universities, 500 colleges enrolling about 2,30,000 students. Since independence India has progressed significantly in terms of higher education statistics. This number has increased to 789 universities, 37,204 colleges and 11,443 stand-alone institutions up to February 2017. Central Government and state Governments are trying to nurture talent through focusing on the number of Universities and Colleges for expansion of higher education. There is no doubt to the fact that much of the progress achieved by India in education has come from private sector. In fact, the public sector and private sector is not in opposition to each other but they are working simultaneously in Indian education sphere. UGC is the main governing body that enforces the standards, advises the government and helps coordinate between centre and states. The chart 1.1 & 1.2 shown below depicts the growth of universities and colleges in India from 1970 to 2017 respectively. The number of universities has grown more than six times in last four decades and the number of colleges has been increased from 3603 in 1970-71 to 37,204 colleges in 2017.

The Growth of universities and colleges in India from 1970 to 2017

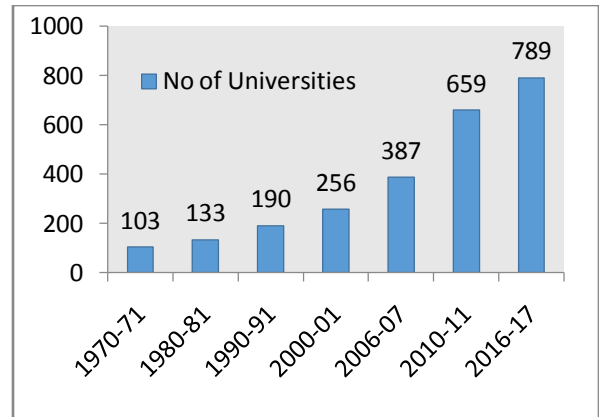


Chart 1.1

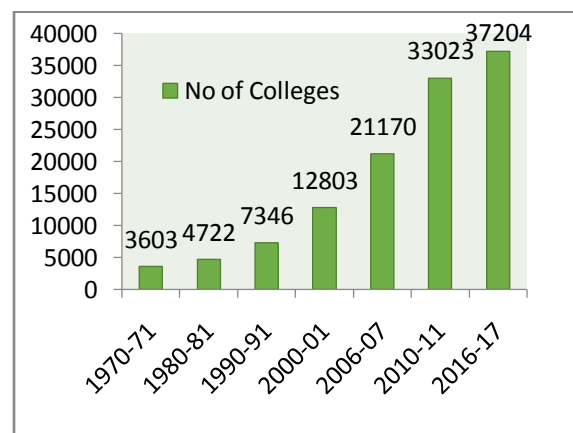


Chart 1.2

Source: Higher Education in India: Twelfth Five Year Plan (2012-17) and beyond FICCI Higher Education Summit 2017

### Challenges in Higher Education in India

In India, the digitization initiatives are encountered with the problems such as lack of national policy, lack of preservation policy, no intellectual property rights policy for content development of digital information, rigidity in the publishers' policies and data formats, lack of multiple Indian language OCR facilities etc. Government tried to boost the education system and implemented various education policies but they were not sufficient to put an example for the universe. UGC is continuously working and focusing on quality education in higher education sector. Still we are facing lot of problems and challenges in our education system. Some of the basic challenges in higher education system in India are discussed below:

*Enrolment:* The Gross Enrolment Ratio (GER) of India in higher education is only 15% which is quite low as compared to the developed as well as, other developing countries. With the increase of enrolments at school level, the supply of higher education institutes is insufficient to meet the growing demand in the country.

*Equity:* There is no equity in GER among different sects of the society. According to previous studies the GER in higher education in India among male and female varies to a greater extent. There are regional variations too some states have high GER while as some is quite behind the national GER which reflect a significant imbalance within the higher education system.

*Quality:* Quality in higher education is a multi-dimensional, multilevel, and a dynamic concept. Ensuring quality in higher education is amongst the foremost challenges being faced in India today. However, Government is continuously focusing on the quality education. Still Large number of colleges and universities in India are unable to meet the minimum requirements laid down by the UGC and our universities are not in a position to mark its place among the top universities of the world.

*Infrastructure:* Poor infrastructure is another challenge to the higher education system of India. particularly the institutes run by the public sector suffer from poor physical facilities and infrastructure. There are large number of colleges which are functioning on second or third floor of the building on ground or first floor there exists readymade hosiery or photocopy shops.

*Faculty:* Faculty shortages and the inability of the state educational system to attract and retain wellqualified teachers have been posing challenges to quality education for many years. Large numbers of NET / PhD candidates are unemployed even there are lot of vacancies in higher education, these deserving candidates are then applying in other departments which is a biggest blow to the higher education system.

*Accreditation:* As per the data provided by the NAAC, as of June 2010, "not even 25% of the

total higher education institutions in the country were accredited. And among those accredited, only 30% of the universities and 45% of the colleges were found to be of quality to be ranked at 'A' level".

*Research and Innovation:* there are very nominal scholars in our country whose writing is cited by famous western authors. There is inadequate focus on research in higher education institutes. There are insufficient resources and facilities, as well as, limited numbers of quality faculty to advise students. Most of the research scholars are without fellowships or not getting their fellowships on time which directly or indirectly affects their research. Moreover, Indian Higher education institutions are poorly connected to research centers. So, this is another area of challenge to the higher education in India.

*Structure of higher education:* Management of the Indian education faces challenges of overcentralization, bureaucratic structures and lack of accountability, transparency, and professionalism. As a result of increase in number of affiliated colleges and students, the burden of administrative functions of universities has significantly increased and the core focus on academics and research is diluted.

### **Online initiatives to promote Higher Education in India**

Online Education system is more likely to be meaningful to learners when it is Learner centered, easily accessible, clearly organized, well written and has a facilitated learning environment. India is second most populous country in the world and has a great responsibility of educating its masses with diverse backgrounds. Many initiatives have been taken by the Indian government to provide and support concept of open education. Initially, the objective was to provide open resources in terms of repositories, libraries, educational media files, e-books, etc. These were made accessible for everybody. Some of the efforts in this direction started as National Digital Repository of IGNOU, SAKSHAT

providing e-content, SHISHYA for XI-XII Standards by CBSE Board, and VIDYAVAHINI integrating IT into the curriculum of rural schools by providing interactive training and developmental communication. Most of these initiatives started with establishing dedicated department to make education reachable to many learners as much as possible. Some of the common names in this path are, Education and Research Network (ERNET) connecting various colleges and schools by providing network connectivity; EDUSAT, a satellite launched for education in India, Consortium for Educational Communication (CEC), use the power of television to act as means of educational knowledge dissemination; Information and Library Network Centre (INFLIBNET) autonomous Inter-University Centre for connecting university libraries. Different initiatives have been taken to promote higher Education in India. Some of these worth mentioning initiatives are as follows.

**Massive Open Online Courses (MOOCs):** A Massive Open Online Course (MOOC) is a web-based platform which provides unlimited number of students worldwide with a chance of distance education with the best institutes in the world<sup>6</sup>. The University Grants Commission (UGC) along with the HRD (Human Resource Development) Ministry has launched the MOOC program in India for higher secondary, bachelors and master's degrees. This will cover a wide range of subjects that may or may not be taught in regular campus studies. Government set off to offer online courses on developing their own platforms. Currently, in India only a handful of universities and institutes have the facilities to start or support such initiative.

**SWAYAM:** Study Webs of Active-Learning for Young Aspiring Minds (SWAYAM), is a Web portal where Massive Open On-line Courses (MOOCs) are available on all kinds of subjects. SWAYAM is the Indian electronic education platform which proposes to offer courses through an ethnic cultivated IT platform which simplifies hosting of knowledge conveyed in classrooms from 9<sup>th</sup> class till post-graduation to

be accessed by anyone, anywhere at any time. All the courses are prepared by the best teachers available from the country, and are free of cost to the residents of India. Across the Country More than 1,000 specially chosen faculty and teachers have participated in preparing these courses. The course section of SWAYAM is divided into four quadrants (1) video lecture, (2) specially prepared reading material that can be downloaded/printed (3) self-assessment tests through tests and quizzes and (4) an online discussion forum for clearing the doubts<sup>7</sup>. On successful completion of the course delivered through SWAYAM, learners, who wants certifications need to be registered, shall be offered a certificate, with a little fee. UGC has already issued the UGC Credit Framework for online learning courses which advises the Universities to identify those courses where credits can be transferred on to their academic record of the students for courses done on SWAYAM. It is powered by Microsoft and will host 2000 courses with 8000 hours of learning.

**NPTEL:** It is a joint initiative of IITs (Indian institute of technology) and IIS (Indian institute of science) funded by Ministry of Human Resources Department (MHRD) under national mission on education through information communication technology provides e-learning through online Web and Video based courses in engineering, science and humanities streams<sup>8</sup>. The Mission of NPTEL is to enhance the quality of engineering education in the country by providing free online courseware. Over 800 courses are complete and made available in NPTEL website. There are more than twenty disciplines covered ranging from nanotechnology to textile engineering.

**National Digital Library (NDL):** MHRD under its NMEICT has initiated the National Digital Library (NDL) pilot project to develop a framework of virtual repository of learning resources with a single-window search facility<sup>9</sup>. Filtered and amalgamated searching is employed to facilitate focused searching so that learners can find out the right resource with least effort and in minimum time. NDL is designed to hold

content of any language and provides interface support for leading vernacular languages. It is being arranged to provide support for all academic levels including researchers and life-long learners, all disciplines, all popular form of access devices and differently-abled learners. It is being developed to help students to prepare for entrance and competitive examination, to enable people to learn and prepare from best practices from all over the world and to facilitate researchers to perform inter-linked exploration from multiple sources. The pilot project is devising a framework suitable for future scale up with respect to content volume and diversity to become a full-blown National Digital Library of India over time. It is being developed at IIT Kharagpur. National Digital Library will ensure "uniform high standards" of e-content free of cost on a single platform. According to AICTE new norms 2017-18, it is essential to become member of National Digital Library of all Colleges and Institutes which is free available by registration. Users can register on the site of MHRD than access required eBooks, journals, E-Databases on NDL.

**e-PG Pathshala:** This is one of the initiatives by MHRD under national mission on education through information communication technology (NMEICT) which offers high quality, curriculum-based, interactive content in 70 subjects across all disciplines of social sciences, arts, fine arts & humanities, natural & mathematical sciences, linguistics and languages. It is a single gateway to 2523 modules which includes e-text, videos, tests etc.

**e-Gyankosh:** Indira Gandhi National Open University (IGNOU) is the central open university that offers distance and open education to millions of learners in India. It produces self-instructional study materials for various programmes and also hosts a number of educational broadcasting channels. IGNOU has initiated the establishment of a National Digital Repository of learning resources namely e-Gyankosh. This repository envisages to store, index, preserve, distribute and share the digital learning resources of open and distance learning (ODL) institutions in the

country: The repository supports seamless aggregation and integration of learning resources in different formats such as self-instructional study materials, audio-video programmes, and archives of radio and television-based live interactive sessions.

### **suggestions for improving the Higher Education system**

The following suggestions are proposed to improve the Higher Education system in India through online programme.

- There is a need to implement innovative and transformational approach from primary to higher education level to make Indian educational system globally more relevant and competitive.
- Higher educational institutes need to improve quality and reputation.
- There should be a good infrastructure of colleges and universities which may attract the students.
- Government must promote collaboration between Indian higher education institutes and top International institutes and also generates linkage between national research laboratories and research centers of top institutions for better quality and collaborative research.
- There is a need to focus on the graduate students by providing them such courses in which they can achieve excellence, gain deeper knowledge of subject so that they will get jobs after recruitment in the companies which would reduce unnecessary rush to the higher education.
- Universities and colleges in both public private must be away from the political affiliations,
- Favoritism, money making process should be out of education system etc.
- There should be a multidisciplinary approach in higher education so that

student's knowledge may not be restricted only up to his own subjects.

### **Conclusion**

Higher education in India has expanded very rapidly in the last six decades after independence yet it is not equally accessible to all. Large section of the population remains illiterate and a large number of children's do not get even primary education. No doubt India is facing various challenges in higher education but to tackle these challenges and to boost higher education is utmost important. With the availability of advanced information and communication technologies (ICTs) and information infrastructure, India becomes an active contributor in digital library movement by digitizing and providing free access traditional knowledge, century-old publications and rare documents, theses and dissertation and journals available in Indian libraries. The National Digital Library of India is one major initiative that is striving to create a truly digital library. Open courseware and cross archive search services are also being developed by different organizations, including the apex higher education agencies. India has spearheaded the digital library movement in developing countries. MOOCs promoted by the government reaches a wider audience, especially those which are out of reach. For those who can't take up a full time course can go for these online courses. Through SWAYAM, students from the backward rural areas can access teaching from the best institutes in the country electronically, thereby, raising the overall standards of higher education in the country. To reach and achieve the future requirements there is an urgent need to relook at the Financial Resources, Access and Equity, Quality Standards, Relevance, infrastructure and at the end the Responsiveness. The e-content should be translated to regional languages so that people from every walk of life may benefit from it. The colleges in remote and rural parts should be provided with broadband connectivity and smart classrooms to embed the e-content in teaching<sup>10</sup>. Teachers should be

trained to be technology savvy and adapt to incorporate the e-content in university curriculum. Students should be made aware about the free availability of digital content by organizing special campaigns and promotional events.

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