

Transforming and empowering higher education through Open and Distance Learning in India

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Abstract

Purpose – Higher education should bring up the multifaceted development of human resources by promoting the knowledge-enabled population that will bring socio-economic mobility, peace and progress in society. Thus, the educational providers must undertake the duty to impart need-based higher education that makes people educated with a progressive, rational, analytical, and skilful mind. Hence, there is an urgent need to address some basic challenges of higher education such as required educational avenues or institutional set up against the demand of the population, achievements in global learning, providing room for equal access to learning, research on cost benefit analysis, educational innovations and partnership, use of educational technology, quality assurance mechanism, need for adequate funds for the expansion of higher education, and so on. Once these challenges are addressed, transformation of the society can be a reality, and Open and Distance Learning (ODL) system is one of the most viable ways for transforming a country like India. The paper aims to discuss these issues.

Design/methodology/approach – For this study, descriptive research methodology has been used, and analysis has been done based on the data extracted from the secondary sources of information such as Census of India 2011; India Human Development Report 2011; Human Development Report 2014, 2015; Economic Survey 2015-2016; NFHS-I, II, III and IV; Report of 11th Five Years Plan; 12th FYP; Annual Report 2015-16, MHRD; Annual Report of NSS, 2016, etc.

Findings – ODL can be raised as an alternative way for making education accessible and for providing scope for skill-based education at a minimum cost. In fact, ODL, in particular, can play a significant role in transforming and empowering the vibrant adult population of a country like India into productive human resources by providing need-based training and equipping them with need-based skills, which are necessary for maintaining a decent standard of living.

Social implications – Through this paper, it could be realised how ODL provides the opportunity of education to a large section of people in the society irrespective of sex and age, and how ODL has made the people capable with basic and essential skills which are necessary for maintaining a decent standard of living.

Originality/value – ODL could be a most viable option to mobilise the higher education system in India. This paper helps to contextualise ODL in empowering and transforming society, and the finding, and discussions have been made with reference to the various initiatives taken in the field of skill-based education through ODL in a country like India.

Keywords Higher education, Empowerment, Transformation, ODL

Paper type Research paper

1. Introduction

It is a generally accepted belief that education contributes to the formation of human beings as productive citizens, besides bringing meaningful changes in their lives. Education is, therefore, also considered as the bedrock of the socio-economic, cultural and political uplift of a society or a country. Education is necessary because it acquaints people with the need-based skills, knowledge and information in their respective fields. Education strengthens the capabilities of the people and helps to bring them up as the knowledge population.



Providing opportunities of education to the people also means that a country is able to protect them against all sorts of discriminations, provide them with the required opportunities, and make them empowered in every aspects of life in the true sense. In the context of the rich demographic dividend in present day India, higher education can be seen as the only way to ensure the targeted economic growth, human mobility and development. After the Economic Liberalisation in 1991, various laws, policies and actions under the means of social and human security have been implemented for ensuring welfare to all. Therefore, to make higher education easily accessible, different educational avenues are being created, as the institutions of higher education in a country are considered the think tanks for development and socio-economic mobilisation, which eventually play a central role in bringing welfare to the people of the country.

However, in a country like India, the irony is that the number of degree takers and degree holders from a college or a university is very few compared to the total population living in India. Besides GER, the need of required higher education avenues or institutional set up against the demand of the population, achievements in global learning, equal access to learning, justice of cost-benefit analysis, research and innovations, use of educational technology, issues related to quality management, mobilising adequate funds for the expansion of higher education etc. are some of the basic challenges the country is currently facing while trying to produce the knowledge-enabled population. Subsequently, the higher educational providers are made to play a prominent role to impart need-based education that would make the people truly educated with a progressive, rational, analytical, and skilful mind. This paper seeks to discuss how the ODL institutions in India should play an important role in bringing up the required human resource development both by promoting the knowledge-based and skill-based education and by protecting them against all antisocial activities that would actually help in empowering and transforming the society.

2. Objectives of the paper

In this paper, an attempt has been made to:

- discuss the significance of higher education in the context of India;
- highlight the various challenges faced by the system of higher education in a country like India; and
- explicate the various strategies for transforming and empowering higher education through the ODL mode of education in India.

3. Methodology or data source

While writing this paper, descriptive research methodology has been used, and analysis has been done on the basis of the data extracted from the secondary source of information. The secondary sources include Report of Census 2011; India Human Development Report 2011; Human Development Report 2016; Economic Survey 2015-2016; AISHE 2016; Annual Report 2016-17, Ministry of Statistics and Programme Implementations; Report of 12th Five Years Plan; Annual Report 2015-16, MHRD; Annual Report 2016, NSS, etc.:

- From the Report of Census 2011, the details about the population strength of India, percentage of adult literacy rate in terms of sex and place of residence have been taken.
- The data used to check the rank of countries in the world in terms of Human Development Index (HDI) and unemployment rate, are from the Human Development Report, 2016, UNDP.

- For the details of public expenditure in higher education in India, data have been taken from the Economic Survey 2015-2016, Ministry of Finance, Govt. of India.
- For knowing about the skill-enabled population in India and abroad like Korea, data have been extracted from the Report of 12 Five Years Plan.
- Annual Report 2015-2016, MHRD has provided the data related to the avenues and educational institutions in India, the enrolment trend of male and female population, Gross Enrolment Ratio (GER) in higher education, the enrolment of SCs and STs, etc. This report has also helped to make a comparative analysis across the states and regions in this country. AISHE, 2016 has provided the required information related to the percentage of colleges to run PhD and post-graduate programmes in India.
- The Annual Report 2016 of NSS has shown the number of male and female learners pursuing general and technical/professional courses in India. Besides, with the help of this Report, the work force participation rate of male and female is also sought to be depicted.
- With the help of the Annual Report 2016-2017, Ministry of Statistics and Programmes Implementations, the adult literacy rate, and differences between urban and rural areas in terms of adult literacy have been drawn in this paper.

4. Higher education: need of the hour

The most significant contribution of Higher education is to disseminate the much-needed knowledge and information to the learners, raise their functional skills, and make them efficient for living at present as well as in future. As the main objective of education is to promote the well-being of the people in a country, the higher education providers should try to increase the capacity of the people by enhancing their skills in various sectors like the sciences, medicines, engineering, management, agriculture, including the other vocational sectors.

It is through higher education that the skilled persons can contribute towards the positive transformation of a society. Thus, at the higher stage, education can boost the human resources and significantly improve their socio-economic conditions. In the following, we shall try to discuss the need of higher education in the context of a country like India.

4.1 Demographic dividend

India has a rich demographic dividend, because the country has 54 per cent of population below the age of 25, and 66 per cent people under the age of 35 (Census of India, 2011). It means that the young population, the number of school-going persons within that age group, and the level of work force within that group, are considered assets for the entire country. If proper skill-based education could be given to this population, they could contribute immensely to the enhancement of the positive social transformation. Therefore, it is the right time to provide skill-based learning opportunity to all, and make them productive citizens in a futuristic educational environment. In this context, I am reminded of the convocation lecture that Dr A.P.J. Abdul Kalam, delivered in Jiwaji University, Guwalior on 10 August 2004, where he stated:

India has a population of one billion people. Out of this one billion, 540 million people are below the age of 25 years, which is our national strength. We have natural resources. In addition, we have a roadmap for transforming India into a developed nation by the year 2020. Ignited minds of 540 million youth will definitely transform India into a developed country by the year 2020.

Therefore, in today's contexts, keeping this demographic dividend as the priority, higher education in India should not be only confined to an individual's physical, mental,

intellectual, and spiritual developments, it should strive for equipping him/her with necessary skills for their own wellbeing as well as for the well-being of the country in which he/she lives.

4.2 The challenge of producing human capital

Human capital plays an important role in the development of a nation. It is the quality of the human beings of a country, which helps in accelerating the pace of development. However, the fact is that human capital can be ensured through proper education only. Educated people are generally more productive workers because they can use the capital more effectively, can adopt new technologies, and learn from previous mistakes. Thus, the concept of human capital is linked with the growth and development of a nation, and education should play an important role in producing the human capital for both the present and the future developments.

4.3 Inclusive growth

The notion of inclusive growth encompasses equality – equality of opportunity in accessing education, in accessing health services, in accessing protection in market and employment transitions and so on. Thus, the Indian Government has set a definite target to ensure equality of opportunity in terms of access in the economic field, in the educational field, in social and cultural norms, in health sector, in the unbiased regulatory environment for business and individuals and so on. Therefore, in order to ensure the inclusive growth, there is the demand of establishing access, equality, quality, and expansion of higher education so that each citizen of the country can lead a meaningful life or is at least able to ensure a decent standard of living.

4.4 Demands for sustainable development goals

On 25 September 2015, the heads of state and central government, and high-level representatives from various countries met at the UN Headquarters in New York and approved the document titled “Transforming Our World: The 2030 Agenda for Sustainable Development adopting a new set of global Sustainable Development Goals”, which is hoped to transform the world in the next 15 years. There are 17 goals to be achieved by 2030 for sustainable development. Goal 4 targets to achieve the inclusive and equitable quality education, and to promote life-long learning opportunities for all. Another objective of the Goal is to focus on the acquisition of foundational and higher order skills, greater and more equitable access to higher, technical, and vocational education and training. In this Goal, as has been reported, until 2013, there were about 757 million adults (aged 15 and above) unable to read and write, and out of them, two thirds were women. This data also shows the urgent need for imparting education to millions of people living in this world.

5. Challenges of higher education in India

It has been mentioned that in a country like India, higher education is necessary for providing a decent standard of living to the people and mobilising their capacity for sustainable development. In fact, sustainable education is directly linked with human resource development that can ensure socio-economic, political and cultural development of the nation. Besides, for the growth of the national income in near future, India needs to be transformed into a major knowledge economy having adequate and abundance of skilled and trained manpower. In this regard, nobody can deny the fact that skill-based higher education is a prerequisite for a developing country. However, higher education in general should be linked with some larger aspects like providing access, equity and employability, deriving long-term benefits from learnt skills, developing life skills and soft skills, ensuring

a knowledge and technology-enabled population and so on, so that human resource development becomes a reality.

In India, at present, there are 758 universities, 39071 colleges, and 11922 stand-alone institutions. Out of 757 universities, 267 are privately managed, 43 are central universities, 1 is central and 14 are state open universities, 69 are institutes of national importance, 316 are state public universities, 5 are institutes under State Legislature Act, 37 are deemed universities, and six are others universities. (Educational Statistics at a Glance 2016 and AISHE, 2016). However, despite this large number of Universities and colleges, access to higher education to every citizen of this country for ensuring the knowledge-based learning is yet to be harnessed. The following are some important observations in this regard:

- Regarding the total enrolment in higher education, only 54 per cent male are able to enroll, on the other hand, the female hover around 46 per cent (AISHE, 2016).
- The GER in Higher education in India is 24.5 per cent, which is calculated for the 18-23 age group, whereas in the developed countries like Germany and USA, it is more than 90 per cent. The GER for male population in India is 25.4 per cent, and for female, it is 23.5 per cent. For the Scheduled Castes, it is 19.9 per cent, in which male occupies 20.8 per cent, and the female 19.0 per cent. For the Scheduled Tribes, it is 14.2 per cent (male 15.6 and female 12.9 per cent), which is very poor compared to the national average. An Indian state like Assam has comparatively poor GER (16.8 per cent) compared to other North Eastern States like Manipur (38.5 per cent), Sikkim (29.4 per cent) etc. (MHRD Report 2016). Besides, it has been observed that the percentage of the female GER is lower compared to that of the male in India and other states of the North East India except in Meghalaya and Sikkim. This reveals that the overall inclusion of girls and women in higher education is poor compared to boys and men (Table I).
- Out of 39071 colleges, only 1.7 per cent colleges run PhD programme, and 33 per cent colleges run postgraduate level programmes. (AISHE, 2016).
- More and more students are enrolled in general courses rather than in professional, technical and vocational. At the undergraduate level, more students are enrolled in arts/humanities/social sciences courses, which are about 40 per cent, followed by engineering and technology (16 per cent), science (15 per cent), and commerce (14 per cent) (AISHE, 2016).
- It is also observed that most of the women learners are enrolled in general and medicine courses rather than in engineering, professional, vocational and IT courses. The following table shows the trend of enrolment of male and female learners in different subjects (Table II).
- In the context of research, only 0.34 per cent students are enrolled in the PhD programmes (AISHE, 2016).
- At the all-India level, the adult (15+years) literacy rate is 69.3 per cent. Among the male, it is 78.8 per cent, and female 59.3 per cent. The rural-urban gap has existed in

Table I.
Gross Enrolment
Ratio (18-23 age
group) in higher
education
(in percentage)

	Total (India)	SC	ST
GER	24.5	19.9	14.2
Male	25.4	20.8	15.6
Female	23.5	19.0	12.9

Source: MHRD (2016)

Table II.
Percentage
distribution of
students pursuing
general and technical/
professional courses
(in percentage)

Course	Male	Female
<i>General</i>		
Humanities	49.9	50.01
Science	59.5	40.5
Commerce	56.6	43.4
<i>Technical/professional</i>		
Medicine	35.3	64.7
Engineering	75.2	24.8
Law	63.9	36.2
Management	62.3	37.7
IT/computer courses	61.1	38.9
ITI/recognised vocational	82.8	17.2
Others	51.1	48.9

Source: NSS 71st Round (2014-2015)

adult literacy rate for both male and female. The adult literacy rate for the female in rural areas is 50.6 per cent vis-à-vis 76.9 per cent in urban areas, whereas for the male, the same in rural areas is 74.1 per cent vis-à-vis 88.3 per cent in urban areas (Annual Report, 2016-2017, Government of India, Ministry of Statistics and Programme Implementation). The following table has depicted the real picture of adult literacy, although the adult population is considered an asset for this country (Table III).

- If higher education is related to human resource development, and if it makes people productive citizen, it has been seen that the Workforce Participation Rate at all India is 25.51 per cent for female, and 53.26 per cent for male. While there is no rural–urban gap for the male (53 per cent), there is considerable rural urban gap for the female (rural 30 per cent, urban 15.4 per cent). (Census, 2011). These figures prove that there is a lack of adequate skills among these people, mostly among the adult learners, for getting their required livelihood opportunities. Besides, it also proves that women have comparatively lower skilled learning than men, particularly in the urban areas. Therefore, it is a big challenge for the women population in the urban areas in getting their adequate livelihood, although they are highly educated in terms of degrees and diplomas.

Therefore, in order to lead this young and vibrant group of people in the right direction by raising their knowledge, skills and attitude, need-based higher education is an absolute necessity for a country like India.

However, providing education to all has been one of the greatest challenges in India because of important but unsolved reasons like lower level of GER, lower level of adult literacy, regional and gender disparities in terms of accessing higher education and so on. If higher education providers are considering skill-based education, the fact is that only 5 per cent of the population belonging to the 19-24 age group, has acquired some skills

Table III.
Percentage of adult
literacy rate by sex
and place of residence
in India, Census 2011

Residence	Male	Female	Total
Rural	74.1	50.6	62.6
Urban	88.3	76.9	82.8
India	78.8	59.3	69.3

Source: NSS 71st Round (2014-2015)

through vocational education, when the corresponding figure for a country like Korea is as high as 96 per cent. (Twelfth five Year Plan, 2012-17 on Social Sectors, Vol. 3). Regarding finance in higher education, the cost of public expenditure is only 1.12 per cent of the GDP, which is very poor compared to many developing countries in the world, for example in Thailand, it is more than 4 per cent (Economic Survey 2015-2016).

Therefore, democratisation of education is an absolute necessity so that everyone can get equal opportunity in education without any bias and differentiation. Although, India has a rich demographic dividend, in terms of HDI, it ranks 131st out of 188 countries on the United Nations Development Programme's new Human Development ranking for 2015. This puts India in the "medium human development" category of countries as compared to Sri Lanka (73rd) and China (90th) which are "high human development" countries. Again, in terms of unemployment rate, Bangladesh is in the 90th position whereas India's rank is 46th among the developing countries in the world (Human Development Report 2016, UNDP). Thus, this situation has posed a big challenge in front of India in terms of making its people empowered in the true sense.

6. Role of Open And Distance Learning (ODL) in transforming and empowering the society

ODL can be raised as an alternative way for creating and making education as accessible as possible and for providing the scope to get skill-based education at a minimum cost. However, the reasons behind the emergence of open universities and ODL institutions are manifold. Some of these reasons are population over-growth, economic liberalisation and globalisation, popularity of global-lifelong learning as well as blended learning, quick expansion of multimedia technology, inclusive growth, need of manpower planning for creating knowledge enabled population and so on. With these facts, along with a National Open University, the state open universities have emerged in India for catering to the needs and demands of the people of the respective states in which they are established. The common motto of the ODL institutions and universities is to bring the positive social transformation in society, and to make the people empowered economically, socially, culturally, and educationally. However, for proliferating the benefits of education, there is an urgent need to reduce the disparities present in the Indian education system, and make education accessible in the real sense, so that everyone irrespective of caste, class, religion, sex, place, occupation, etc. can avail the benefits of education.

Thus, we need an alternative institutional set-up besides the conventional system of education, because it can reduce the disparity in terms of access to education in general and higher education in particular. ODL is a mode through which the system of Higher Education can be transformed and empowered in an unprecedented way. ODL can provide justice to millions of people in achieving the motto of higher education (access, equity, quality, innovation and research). Finally, ODL can lead to the development of the capabilities of the people and make them productive and empowered citizens. In fact, higher education should build up the capacity of the people by disseminating knowledge and information, and making them competent with the required and essential skills that will finally lead to a productive and empowered group of citizens in the society. Thus, it will lead to the positive social and economic transformation in the society. In the following sections, we shall try to look at ODL in a more engaging way.

6.1 ODL and its relevance

The primary objective of the ODL is to provide knowledge and skills to those who did not have access to learning. The basic purpose of the open universities is to provide instruction to the learners at their doorsteps through various media and technology (UNESCO, 2002).

The basic motto of ODL is to establish equity in the education system through various modes of education (both the correspondence and on-line learning). This system provides great opportunity to those learners who are denied access to education in traditional institutions due to various factors such as poor economic condition of the family, parent's illiteracy, staying away from home for income generation etc. and to those who require updating their knowledge and skills through education. The mode of ODL is also called as "Independent Learning", "Flexible Learning" as well as "Self-Learning". It can help to empower the learners by enabling them to take charge of their own learning and enabling them in having greater control and ownership on their own learning at a minimal cost. Therefore, this system of learning can be called as "fed by own" not "fed by others". Besides, in terms of flexibility, the Open University has the autonomy to adapt different approaches for the development of course materials as well as learner's support services. The utilisation of on-line learning in distance and open learning makes it in a true sense open or global learning.

The National Knowledge Commission (NKC) purposefully stated that, "Open and distance education enabled and delivered through information and communication technology (ICT) holds the promise to address the questions of access, and provide new, alternative forms of capacity building." (NKC, 2009, page 4) Considering the wide scope of the ODL system in providing flexible access to higher education general, professional and vocational, since 1980s, the central and state governments of India have given due emphasis, on the expansion of quality higher education through the ODL mode. This has resulted in the establishment of one National Open University (IGNOU), 14 state open universities, and more than 112 Directorate of Distance Education attached to conventional Universities spread across India. In fact, ODL accounts for about 12 per cent of the total enrolment in the segment of higher education, and has contributed substantially towards the rise of the GER of India, which is 24.5 per cent. The most significant contribution of ODL in higher education is that it provides the wider opportunity to the female learners for educating themselves and having a dignified life in the society. For instance, the women enrolment in higher education through distance mode is 46.03 per cent whereas in regular mode, women share is 45 per cent only (AISHE, 2015-2016).

Again, if we make an analysis of the enrollment trend in different ODL institutions across India, we find that the number has grown at a very fast rate, as we can surmise from Table IV.

The trend of enrolment in distance education is graphically represented below in Figure 1, where it is found that the trend of enrolment in distance education is able to motivate the learners and provide them with the scope to access higher education at anytime, anywhere and for anyone.

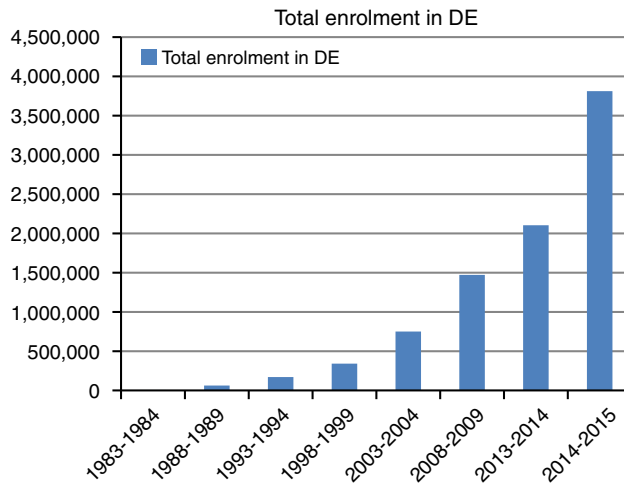
As stated above, the fast growing enrolment trend in ODL has provided unprecedented scope to bring education to the doorstep of the unreached, which is one of the most

Year	Total enrolment in DE
1983-1984	6,231
1988-1989	62,923
1993-1994	170,372
1998-1999	341,444
2003-2004	750,342
2008-2009	1,472,379
2013-2014	2,104,291
2014-2015	3,811,723

Source: Distance Education Bureau, UGC

Table IV.
Trend of enrolment
at Indian open
universities

Figure 1.
Trend of distance
education in India



important philosophical aspects of ODL in general. Moreover, the emergence of Online Learning and E-Learning systems have enhanced the functionality of ODL not only by providing various educational opportunities to those hitherto been deprived of education, but also by inviting thousands of fresh learners towards this mode by inculcating the philosophy of life-long learning.

In this regard, the NKC, 2006 rightly stated that the appropriate application of knowledge in an area like agriculture can play a major role in boosting the agrarian economy and giving the Indian farming a competitive edge in the global market, and ODL institutes can play the pioneering role.

Thus, the ODL mode of education, because of its flexibility and low cost, has the potential to create the knowledge-movement in every aspect of human life in society, which can lead to sustainable as well as dignified living among the concerned stakeholders, and which can further transform and mould the society in the intended direction.

6.2 Initiatives to be taken by the ODL institutions

For ensuring mobilisation and transformation in society, various initiatives can be undertaken by the ODL institutions. As the vision and mission of a university or an educational institution are focussed on the needs of the locality and on fulfilling the needs and desire of the stakeholders, the university authorities should ensure some special contributions to the society and the country, besides trying to maintain the status and reputation of the university in the competitive age. In this regards, due to the nature of flexibility and its openness, Open Universities and ODL institutions play the role of people's university by harnessing the needs and demands of the common masses. This means that the education received even from a open university should gear up the living standard of the people so that they can lead a dignified life. Nobody can deny the possibility and prospects of sustainable education that would ameliorate the living standard of the people at present and near future. Skill-based education could bring viability to the institutions as well as to the people in terms of ensuring their sustainability and generating employment opportunities in the present world. Therefore, an open university or an ODL institution should develop need-based and skill-based courses, which have the direct link with industrial and vocational recruitments.

Again, in order to maintain academic reputation, an open university should design such courses that would bring special credit and recognition to the university itself. Before launching the course, the faculty members of the university should be sent to field works, or to different exchange programmes for understanding the validity, reliability, and authenticity of the courses in a practical way. Once they return with some experience, the university should assign on them the duty to prepare the course content and subsequently launch the programme. This process can help the university to identify the shortage and paucity of manpower in the society in various fields, and then, supply future manpower by launching the need-based courses. Besides, the content of the syllabus must be up-to-date, regularly monitored, and revised by an internal or external Quality Assurance Unit. Again, there should be some provisions in the university to become self-sustaining by generating its own revenues or by generating its own income through student's fees, own agriculture and farming products and so on. However, some other important initiatives can be taken to successfully run an educational institution particularly through the ODL mode. These are as the following:

- Use of ICT in the ODL institutions: in the present technology-based era, each higher educational institution, most specifically the open universities and ODL institutions, should be comfortable with the use of technology, and the teachers should design various academic and ICT-based modules for the benefit of the learners in a wider context. The application of National Knowledge Network (NKN), National Programme on Technology Enhanced Learning (NPTEL), National Mission for Education through Information and Communication Technology, SIRD linked with Satellite hub for with Satellite Interactive Terminal (SIT), are some of the online programmes, which can bring in a marked difference in the functioning of the educational institutes of this country with an objective to bring together all the stakeholders in the field of science and technology, higher education, research and development, governance, and so on (Bordoloi and Das, 2012). Although this mission of NPTEL is intended to enhance the quality of engineering education in the country by providing free online courseware, the open universities and ODL institutions can also tie up with these providers, so that all students can utilise the resources.
- At present in India, Study Webs of Active Learning for Young Aspiring Minds (SWAYAM), has been introduced by the Ministry of HRD, GOI, where teachers from institutions like the IITs, IIMs, and central universities have been offering online courses to the citizens of India. In order to ensure the quality of the contents produced and delivered through SWAYAM, seven National Coordinators have been appointed. They are NPTEL for engineering, UGC for post-graduation education, Consortium for Educational Communication for under-graduate education, NCERT and NIOS for school education, IGNOU for out of the school students, and IIMB for management studies. In the first phase, courses in areas of engineering education, social science, energy, management, basic sciences are being offered, and at least one crore students are expected to benefit in 2-3 years through this initiative. Besides, it has been stated that at least 20 per cent materials from the total number of courses by an Indian University should be released in the form of MOOCs for the fast mobilisation and dissemination of knowledge and information among the masses. Another recommendation is that all universities should develop the learning management system and release their open educational resource (OER) materials as MOOCs in the SWAYAM platform as soon as possible for making education more vibrant and sustainable.
- OERs: for the greater interest of the public or the stakeholders, the use of OERs has presented itself as the most viable option to disseminate educational benefits to the whole of India. The historical and functional definition of OER, as has been pointed out by UNESCO in 2002, is: "Technology-enabled, open provision of educational

resources for consultation, use and adaptation by a community of users for non-commercial purposes...typically made freely available over the Web or the Internet" (Kawachi, 2013). In India, where higher education usually benefits only a small section of the people, because of its being a very costly affair, OERs have provided ocean of opportunities to enjoy the benefits of education even without going to an educational institute. In today's world, OERs have emerged as the resources to be used for sharing, adapting and reusing in order to educate the whole masses. In India, MOOCs may push the OER-movement to a significant height. With the help of the different Community Information Centres, NGOs and other Social and Government Organisations located at different parts of the country, educational institutions may use OERs that can enlarge teaching-learning experiences, expand the reach of education, and make learning possible through participation and from multiple sources at the same time. Of late in India, following the National Knowledge Network Project, various courses have been launched in the form of OERs and MOOCs, particularly by the ODL institutions, which became instrumental in training people mostly in the field of agriculture and small-scale industries for a better socio-economic growth of India.

Thus, OERs can be seen as an evolving pedagogy in the context of present-day India and other countries of the world. Gajaraj Dhanarajan and David Porter (2013) tried to portray in their book about the perspectives on OER in the Asian countries like China, Hong Kong, India, Malaysia, Pakistan, Indonesia, Vietnam, Japan, Korea and so on. Besides, it also provided some information regarding some important case studies conducted in some Asian Open Universities and the discussions of which provide many important ideas regarding the use and practices of OERs in the context of Asia. The experiences gained through the findings in this book will help many new universities to conduct the OER practices in their Region in extensive ways. Similarly, Paul Kawachi (CEMCA, 2013) in his book has provided some meaningful, relevant and appropriate use of ICT-enabled OERs to serve the educational and training needs of the Commonwealth member states of Asia. By consulting these resources and models, the Indian universities and institutions can also design its SLMs as part of Open Access applicable in the their regions.

- Skill development through ODL mode: for producing a skill-enabled population in India, in December 2013, the Department of Economic Affairs, Ministry of Finance, Govt. of India, notified National Skill Qualification Framework (NSQF), which is being facilitated by the National Skill Development Agency. This policy can easily be adopted by the ODL universities and institutions for its flexible nature. The NSQF provides the outcome based approach, which is very much essential for assessing the acquired knowledge of the people in immediate way. Again, it is also helpful to each institution, student and employer to get themselves a self-assessment regarding the progression pathways in terms of their competency level i.e. what they can do and cannot do after taking the course under NSQF. Besides these, this is the only framework through which uniformity in terms of course duration, curriculum, entry requirements as well as title or degree to be awarded across the country can be established. The most interesting benefit of this course is that it facilitates the Recognition of Prior Learning through which people irrespective of their age, sex, and geographical distance can get formal recognition of their traditional skills. The NSQF also helps in the alignment of the Indian qualifications to international qualifications in accordance with relevant bilateral and multilateral agreement. Thus, each Indian Open University should adopt such recognised skilled-based courses in order to develop the national and international mobility among the people across the nation.

- Mobile Learning: in the context of the twenty-first century, Mobile learning is yet another educational avenue that can easily transform the arena of higher education by disseminating knowledge and information at a cheaper cost. It was Bangladesh Open University, which for the first time used M (Mobile) Learning for transforming the rural population in Bangladesh among the South Asian Countries of the world. Even, UNESCO and United Nations High Commissioner for Refugees celebrate some events like Mobile Learning Week where the basic agenda is to promote education in emergencies and crises situation. The open universities and ODL institutions in India can use mobile learning in a significant way for strengthening Inclusion in education and preserving the continuity of learning during the time of conflict and disaster.

7. Conclusion

ODL can facilitate as well as strengthen the system of higher education in India to a significant extent. It is because ODL can easily provide quality education and global learning at the doorstep of the people at a cheaper cost. It also encourages people to share their knowledge and innovative thoughts by using various ICT tools in a wider context. However, the vision of an open university or an ODL institution should be focussed on the needs of the locality as well as on fulfilling these needs. In order to maintain reputation, an open university should design such courses that bring special credit and recognition to the university itself. The education received even from an open university or an ODL institution can gear up the living standard of the people so that they are able to have a dignified life. Therefore, an ODL institution should try to develop need-based and skill-based courses, which have the direct link with industrial and vocational recruitments. Thus, ODL shall surely be able to transform and empower the current phase of higher education in a country like India.

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