





Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:12(5), December: 2022
Online Copy of Article Publication Available (2022 Issues)

Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: 2nd December 2022
Publication Date: 10th January 2023
Publisher: Sucharitha Publication, India

Digital Certificate of Publication: www.ijmer.in/pdf/e-CertificateofPublication-IJMER.pdf

DOI: http://ijmer.in.doi./2022/11.12.84 www.ijmer.in

NATIONAL EDUCATION POLICY-2020 IN OPEN AND DISTANCE LEARNING THROUGH ICT

Dr. Amirullah

Assistant Professor R.R.S. College, Patliputra University Mokama, Patna, Bihar, India

Abstract

Education has undergone a paradigm shift due to the rise of Information and Communication Technology (ICT) and the outbreak of COVID-19. The New National Education Policy-2020 (NEP-2020) focuses on the extensive use of technology in teaching and learning, removing language barriers, increasing access as well as education planning and management. Open and Distance Learning (ODL) and ICT are considered as a means through which equity, access, and quality of education could be attained. The significant advantage of ICT in education is a synchronicity, or "anytime, anywhere learning." This has ushered an era of new hopes and new horizons for students for their future benefits. This paper analyzes various provisions of NEP-2020 in ODL and its influence in creating an enabling environment towards the ultimate aim of an Aatmanirbhar Bharat through massive impetus on ICT in the form of e-learning.

Keywords: National Education Policy-2020, ICT, Open and Distance Learning, Aatma Nir Bhar Bharat.

Introduction

We are living in an age of knowledge and information. For hundreds of millions of young people in India, education is about discipline, development, curiosity, creativity and a path to breaking the cycle of ignorance and poverty, leading to employment and prosperity. Education is empowering and redefining. It is not just about classes but about interactions, broadening of ideas, free-flowing open discussions, debates, and mentoring of each student.

The students lived with their teachers in the ancient Gurukula system of education. The students go to schools and colleges for their study in modern design of education. Now, with the advancement of ICT, students can study from their homes. ICT has created a physical gap between the student and teachers.

The conventional system of education continues to be mainstreamed in spite of several inherent limitations. One of the most serious limitations is of limited access, i.e. it fails to provide equitable learning opportunities to all. To overcome this problem, education beyond the four walls was offered for the first time by the University of South Africa. Since then, it has spread to all parts of the globe and has evolved through many generations-from the print based correspondence model to intelligent-flexible e-learning. ODL offers far more flexibility and openness in terms of pace of learning, place of learning, age, relevance for all in anytime, anywhere and any paradigm. It is characterised by flexibility concerning admission requirements, choice of courses, duration of completion of the programmes, modularity, pace, place and time of the study. It can cater to large segments of our population; reach out to the deprived and marginalised sections of society, such as scheduled castes, scheduled tribes, women, physically challenged and working professionals, as well as those living in rural and remote areas.

ODL was first known as "Distance Learning" before it became "ODL"; indeed, the concept "Distance Learning" emerged from the idea of "Distance Education" which came from "Correspondence Education", which itself arose from "Non-formal Education". One of the objectives of ODL has been to provide learners with an opportunity to study regardless of geographical, socioeconomic or other constraints, i.e., to provide openness concerning teaching and learning to all potential students.

The variety of programmes and courses offered by distance learning institutes is enormous. In addition to regular subjects, several innovative programmes are offered, such as gardening, personality development, horticulture, natural resource management, shoe manufacturing, mushroom cultivation, water treatment, sustainable community development, intellectual property rights, disaster management, etc. These programmes impart knowledge, encourage capacity building and entrepreneurship. It can reach out to thousands of students simultaneously without compromising on quality.

There are many groups that find ODL more convenient to realise their dream of earning a certificate, diploma or degree. These include those living in far-off places, remote and rural areas, women, street children, refugees, destitute, jail inmates, dropouts







Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:12(5), December: 2022
Online Copy of Article Publication Available (2022 Issues)
Scopus Review ID: A2B96D3ACF3FEA2A

Article Received: 2nd December 2022 Publication Date: 10th January 2023 Publisher: Sucharitha Publication, India

Digital Certificate of Publication: www.ijmer.in/pdf/e-CertificateofPublication-IJMER.pdf

DOI: http://ijmer.in.doi./2022/11.12.84 www.ijmer.in

and physically challenged. These include regular subjects in the field of social sciences, sciences, education, management, law, media, agriculture, etc., as well as non-conventional programmes.

In ODL, lectures are taken online at a specified time or are recorded as videos and podcasts. The assignments are done on a computer and often graded by a computer. The classroom independence also means that there are no admission restrictions. The size of the room no longer limits the class. It can grow to accommodate any number of students. It adopts a flexible approach regarding content selection, pace and place of study in an ever-updating manifestation of modern communication technology. The workers who are unable to attend regular classes due to lack of time and wish to improve their skills in a particular professional area for vertical career growth and development join ODL. Some may join to apply for jobs that require an advanced degree or to continue their lifelong learning through training and retraining.

The development of ICT has a positive impact on distance learning. New tools are being used to deliver education in distance mode. Advances in information technology and increased access to computers/smart phones have revolutionized distance learning. The programmes range from certificate programs to research degrees, including bachelors, masters, M. Phil and Ph.D. degrees.

Though technology can neither replace the teacher in the classroom nor in front of the camera, it necessitated a change in their role, from a monolithic repository of knowledge to a multi-skilled facilitator who helps/trains the learners to navigate through a course/programme.

The students were taking only regular courses from colleges and Universities as they were not aware of taking any distance education courses along with it. With the emergence of online education, students can take certificate courses and gain knowledge along with regular classes. The government has also allowed students to take certificates, diplomas and other courses along with the regular subjects which will boost the knowledge of all students, whether it is dropouts or those whose study has been discontinued. Many new subjects/disciplines have emerged relevant to the needs of the students and society.

Since India gained independence, many education policies have been set up by the Government of India from time to time. NEP-2020 is the third NEP, succeeding the 1968 and 1986 guidelines. Though the government amended the 1986 policy in 1992, it was largely the same. But there have been gaps between recommendations and implementation due to social and political pressures, and also administrative lapses.

NEP-2020 in Open and Distance Learning

The NEP-2020 focuses on multiple aspects, including the need for early childhood care, inclusive education and revamping the current curriculum. It states that one of the central principles for steering the education system will be the 'extensive use of technology in teaching and learning, removing language barriers, increasing access as well as education planning and management'. The thrust of technological interventions will be to improve teaching-learning and evaluation processes, support teacher preparation and professional development, enhance educational access, streamline educational planning, management, and administration, including processes related to admissions, attendance, assessments, etc. Some of the key aspects of the policy dealing with technological interventions in education are as follows:

- a. Pilot Studies for Online Education: The policy states that there will be a series of parallel pilot studies to be conducted by institutions such as the National Educational Technology Forum (NETF), Central Institute of Educational Technology (CIET), NIOS, IGNOU, IITs and NITs to assess the benefits of integrating education with online education while mitigating the downsides and also to study related areas, such as, student device addiction, most preferred formats of e-content, etc. The results of these studies will be publicly communicated and used for continuous improvement.
- **b. Digital Infrastructure:** It states that to address large scale diversity, complexity and device penetration, there is a need to invest in creating an open, interoperable and evolving public education digital infrastructure that can be leveraged across multiple platforms. This will ensure that the technology-based solutions do not become outdated with the rapid technological advances.
- c. Online Teaching Platform and Tools: The existing e-learning platforms such as SWAYAM, DIKSHA and others will be extended to provide teachers with a structured, easy-to-use and rich set of assistive tools for monitoring progress of learners. As the current pandemic has shown, tools such as two-way video and two-way audio interfaces for conducting online courses are a real necessity.
- d. Content Creation, Digital Repository and Dissemination: The policy highlights that a digital repository of content including creation of coursework, Learning Games and Simulations, Augmented Reality and Virtual Reality will be developed, with a







Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:12(5), December: 2022
Online Copy of Article Publication Available (2022 Issues)
Scopus Review ID: A2B96D3ACF3FEA2A

Article Received: 2nd December 2022 Publication Date: 10th January 2023 Publisher: Sucharitha Publication, India

Digital Certificate of Publication: www.ijmer.in/pdf/e-CertificateofPublication-IJMER.pdf

DOI: http://ijmer.in.doi./2022/11.12.84 www.ijmer.in

clear public system for ratings by users on effectiveness and quality. Student tools such as the apps, gamification of Indian arts and culture are also created for playful learning, in several languages, along with clear operating instructions. For this, a reliable backup mechanism for disseminating e-content to students will also be provided.

- e. Addressing the Digital Divide: The Policy is also cognizant of the digital divide and at the same time recognizes the importance of leveraging the advantages of technology while acknowledging its potential risks and dangers. The existing mass media, such as television, radio, and community radio will be extensively used for telecast and broadcasts. Such educational programmes will be made available 24/7 in different languages to cater to the varying needs of the student population. A particular focus on all Indian languages will be emphasized and required. Digital content should reach the educational medium of teachers and learners as much as possible.
- f. Virtual Labs: The existing e-learning platforms such as DIKSHA, SWAYAM and SWAYAMPRABHA will also be leveraged for creating virtual labs so that all students have equal access to quality practical and hands-on experiment-based learning experiences. The possibility of providing adequate access to Socio-Economically Disadvantaged Groups (SEDG) students and teachers through suitable digital devices, such as tablets with pre-loaded content, will be considered and developed.
- g. Training and Incentives for Teachers: All the teachers will undergo rigorous training in learner-centric pedagogy and on how to become high-quality online content creators themselves using online teaching platforms and tools. The teacher's role is emphasized by encouraging students to actively engage in content and interaction.
- h. Online Assessment and Examinations: The proposed National Assessment Centre or PARAKH, School Boards, National Testing Agency (NTA), and other identified bodies, will design and implement assessment frameworks encompassing the design of competencies, portfolios, rubrics, standardized assessments, and assessment analytics. Studies will be undertaken to pilot new ways of assessment using education technologies focusing on 21st century skills.
- i. Blended Models of Learning: The policy highlights that while promoting digital learning and education; the importance of face-to-face, in-person learning is fully recognized. Accordingly, different effective models of blended learning will be identified for appropriate replication for different subjects.
- **j.** Laying down Standards: As research on online/digital education emerges, NETF and other appropriate bodies shall set up standards of content, technology, and pedagogy for online/digital teaching-learning. These standards will help to formulate guidelines for e-learning by States, Boards, schools and school complexes, HEIs, etc.

Thus, the structural and systemic changes forwarded by the NEP-2020 empower the universities and institutions to offer education in both modes, face-to-face and online. The imperatives of allowing Open Distance and Online Learning (ODL & Online) lie within the premise of education policy, i.e. Access, Equity, Quality and Affordability. The NEP intends to enhance the Gross Enrolment Ratio to 50% by 2030 and comply with Sustainable Development Goal-4. So, NEP is not about the degree but about focusing on life skills and vocational courses. It is the gateway of online education where students can think big apart from mainstream subjects and make their life skills into job-ready courses in minimum time.

ICT in Open and Distance Learning

ICT has become integral to the teaching-learning interaction through such approaches as replacing chalkboards with interactive digital whiteboards, using student's smartphones or other devices for learning during class time, and the 'flipped classroom' model where student watch lectures at home on the computer and use classroom time for more interactive exercises.

ICT tends to expand access to education to all sections of the society. Through ICT, online course material can be accessible anytime and anywhere. Tele-conferencing classrooms allow learners and teachers to interact simultaneously with ease and convenience. Based on ICT, learning and teaching no longer depend exclusively on printed materials. Now, electronic-based course materials have replaced print-based course materials. Multiple resources are abundant on the Internet, and knowledge can be acquired through video clips, audio sounds, visual presentations and so on. The emerging technologies such as artificial intelligence, machine learning, robotics and automation, the Internet of things, blockchain, cloud computing, smart boards, hand-held devices, and e-proctored exams are exponentially expanding and impacting teaching-learning methods, within and beyond the classroom.

The use of ICT has been found to assist students in accessing digital information efficiently and effectively, support student-centred and self-directed learning, produce a creative learning environment, promote collaborative learning in a distance-learning environment and offer more opportunities to develop critical thinking skills. It saves significant amounts of money and time without commuting, has the flexibility to choose, and gives the opportunity to earn while you learn.







Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:12(5), December: 2022
Online Copy of Article Publication Available (2022 Issues)
Scopus Review ID: A2B96D3ACF3FEA2A

Article Received: 2nd December 2022 Publication Date: 10th January 2023 Publisher: Sucharitha Publication, India

Digital Certificate of Publication: www.ijmer.in/pdf/e-CertificateofPublication-IJMER.pdf

DOI: http://ijmer.in.doi./2022/11.12.84 www.ijmer.in

In the beginning, distance education centre's offered various courses to students through correspondence mode. The students were provided with printed study materials. All the classes and examinations were conducted in an offline mode. Some centres like IGNOU prepare video lectures for students to make learning easier. There was no concept of taking online classes through the existing ICT tools. The introduction of new technologies has given rise to fundamental changes in the educational system, including teaching and learning activities. In recent years, the offering of Online and Distance Education courses and programs has become increasingly popular not only in open universities but also in traditional universities. The NEP-2020 focuses on online as well as offline modes of education.

There was no culture of online education in Indian institutions, except there was a proposal to build smart classes for various academic purposes. With the outbreak of COVID-19, when schools, colleges and Universities were closed, online methods of conducting academic activities were started. For this, the institutions began using existing platforms like Google Classrooms, Microsoft Team, Zoom, Cisco Webex and others to continue the process of learning and conducting examinations/viva, and other academic activities.

For many students, obtaining a degree may not be enough, as the job market demands specific skills and knowledge beyond the degree course. These students look for certificate courses that enhance their knowledge and skills within a particular domain. At the same time, certificate courses in India open doors to more employment opportunities. In India, numerous institutes and universities have started offering certificate courses in regular, distance and online modes in different streams such as Management, Healthcare, Education, Foreign Languages, Arts, Commerce, Science, Law, etc. These courses are highly relevant in the job market.

With the introduction of ICT, students can now benefit from a more flexible learning environment and reduced tuition fees that remain same or at least increase slowly in institutions. Online education provides a global forum for teaching courses that can be dynamically updated in ways never before possible. A vast range of resources is available to each student without time and space constraints.

The collaboration with industry/government institutions will help the learner acquire skills and training as required by industries. The learner could be prepared for future jobs through skill up-gradation, inculcating soft and professional skills. All such learners may be subjected to skill assessment tests and skill gaps, so identified, can be trained face-to-face and online.

The ODL mode of learning has a different curriculum, pedagogy, assessment, and student support for enhanced student experiences compared to the conventional face-to-face mode of higher education. Hence, teachers from traditional universities need training and orientation to support ODL and Online learning communities.

Online education is useful and during the COVID outbreak, the online courses help students lot to reshape their skills and talent. The engagement of online courses is increased tremendously which itself define a good sign of sensibility of today's generation toward exploring new things with the help on AI and e-learning.

IGNOU established EduSat (a satellite dedicated only to education) on 20th September 2004, to play a lead role in a new era of technology-enabled education in the country. The university emphasized the development of multimedia and an online learning component in the existing distance learning programmes.

ICT has also enabled the development of Virtual Universities that offer online education. In a Virtual University, the entire process from admission to examination, i.e. admission, delivery of content and learner support services, are provided through the Internet. Even correspondence between the learners and teachers or functionaries of a virtual university is primarily online. Submission of assignments, examinations and evaluations are also online. Some of the leading Virtual Universities are Virtual Global University, Germany; Canadian Virtual University, Canada; Michigan Virtual University, USA and Virtual University of Pakistan, Pakistan.

In India, Tamil Virtual Academy, formerly known as the Tamil Virtual University, established on 17th February 2001, is a distance learning institution based in Chennai, Tamil Nadu. It was established both as an educational institution and a society for providing internet-based educational resources and opportunities for the Tamil diaspora (and others). It aims at providing internet-based resources and opportunities for the Tamil communities living in different parts of the globe as well as others interested in learning Tamil, science, technology, Tamil computing software and acquiring knowledge of the history, art, literature and culture of the Tamils and to identify, establish, maintain and promote the solutions for the Tamil computing requirements of Tamil Diaspora,







Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:12(5), December: 2022
Online Copy of Article Publication Available (2022 Issues)

Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: 2nd December 2022
Publication Date: 10th January 2023
Publisher: Sucharitha Publication, India

Digital Certificate of Publication: www.ijmer.in/pdf/e-CertificateofPublication-IJMER.pdf

DOI: http://ijmer.in.doi./2022/11.12.84 www.ijmer.in

Government, educational, media and business institutions. The use of 3D technologies such as Second Life, a 3D immersive technology that is being used in social networking, is adding a new dimension to the virtual university.

Key Concerns to Implement NEP-2020

The NEP empowers traditional universities and institutions to offer education in both modes, i.e. face to face and online. It architects large-scale affordable access to high-quality education and adopts a learner-centred education with a multi-disciplinary approach. The policy recommends adopting new pedagogical tools and techniques like blended learning in flipped classrooms, experiential learning, etc. However, there are serious issues related to access, devices, content, curation, teachers, training, exams, grades, funding, facilities, salaries, parents and fees. The usage of various features and functions for different online platforms makes online classes intricate. Learning is a process in which social interactions play a vital role. But there is an absence of social interactions in online education. For many students, not having enough interaction with teachers and peers is among the biggest challenges of studying online and passing their courses.

The policy is not clear about the teacher-students ratio in ODL whether it will increase or remain same as in offline mode i.e. 30:1 and 25:1 (for socio-economically disadvantaged students). In ODL, many students can join the class but the quality of teaching method is going to suffer. Many institutions are combining different sections of the same classes for online lectures. In this way, the attendance of students increases in online classes and a burden on teachers to focus each and every student. The workload of teachers also increases to take assignments and exams in addition to online lectures. The students who are not performing well in the class are not adequately cared.

There are many setbacks to increasing online education in the current situation but this pandemic forced us to change our lives and the uses of gadgets like mobile, tablets, laptops in our daily life. Still, the poor internet speed and costly gazette will create a big wall between the last aspirants of the nation. It depends upon the institutions to implement which will depend on their existing ICT infrastructures. Many of them do not have that speed and moreover, computers processors are not compatible with the recent software's. It is estimated that only about 25 percent of Indian households have an internet facility. For rural households, that number drops to 15 percent. The marginalised, rural and poor populations will always be the worst affected.

The policy is unclear whether it will be compulsory, optional, or both. With fewer COVID cases, all the universities and colleges have resumed offline academic, teaching and learning activities. Some lectures, talks, seminars and conferences are conducted only online. The policy recommends for blended learning but the classes are conducted offline.

Despite having the second-largest internet user base with over 700 million subscribers and the cheapest mobile data prices in the world, the digital divide, i.e. digital discrimination is an emerging reality in India. The benefits of online education cannot be leveraged unless the digital divide is eliminated through concerted efforts. As per report published jointly by the Internet and Mobile Association of India (IAMAI) and data analytics firm Kantar, though rural India is driving more than half of the Internet usage in the country, there is an infrastructure shortage, especially in rural and distant places. The government launched several schemes like Bharat Net project, National Digital Literacy Mission, Digital Saksharta Abhiyan, Digital India campaign, Pradhan Mantri Gramin Digital Saksharta Abhiyan and other schemes to connect the entire country. But still, there are some rural regions not having Internet connectivity. Besides, a large section of students is illiterate and cannot operate digital devices though the literacy rate in India is 74.04 percent as per census of 2011. It is important that the use of technology for online education adequately addresses concerns of equity.

According to the Internet Availability Index across India (Fig. 1), infrastructure is poorly ranked 48 out of 120. The power shortage is also one of the reasons for the digital divide that has ranked 48 out of 120. Despite this, internet usage (table-1), is ranked highest at 87 out of 120. This shows that there is a need for internet, but the available infrastructures are incompatible with people's needs. This huge network congestion slows down internet speed despite having a 4G or 5G connection.





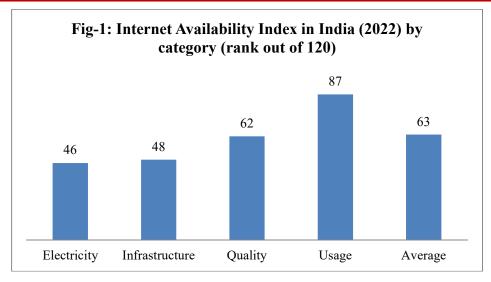


Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:12(5), December: 2022
Online Copy of Article Publication Available (2022 Issues)
Scopus Review ID: A2B96D3ACF3FEA2A

Article Received: 2nd December 2022 Publication Date: 10th January 2023 Publisher: Sucharitha Publication, India

DOI: http://ijmer.in.doi./2022/11.12.84 www.ijmer.in

Digital Certificate of Publication: www.ijmer.in/pdf/e-CertificateofPublication-IJMER.pdf



Source: Statista 2022

The IAMAI Kantar ICUBE 2020 report says that almost 1 out of 10 active internet users (11%) are doing activity related to online learning. While only 9% of active Internet users in rural India use internet for online learning, the same number stands at 13% in urban India.

Table-1: State/Service Area-wise Internet Subscribers (Number/Per 100 Population) by Residence in India (As on June, 2021)

States/UTs	No. of Internet Subscribers per 100 Population		
	Rural	Urban	Total
Andhra Pradesh	53.25	97.56	71.04
Assam	34.25	120.4	47.48
Bihar	26.4	82.16	35
Delhi	-	-	218.69
Gujarat	44.74	102.01	72.46
Haryana	46.64	88	63.65
Himachal Pradesh	66.64	316.14	92.26
Jammu & Kashmir	39.4	112.53	61.4
Karnataka	48.62	107.06	74.1
Kerala	131.89	67.13	85.4
Madhya Pradesh	28.73	100.56	49.01
Maharashtra	47.98	118.31	82.01
Odisha	40.61	91.98	50.15
Punjab	52.67	140.15	90.69
Rajasthan	38.07	109.64	56.95
Tamil Nadu	43.42	97.54	72.26
Uttar Pradesh	28.74	89.4	43.5
West Bengal	34.03	100.47	58.07
North East	47.22	82.23	59.02
India	892.61	472.91	1365.39

Source: https://www.indiastat.com/

ODL focus on Self Learning Materials (SLM) in addition to textbooks. It can be considered that there is less relevance of textbooks for students in an online learning as every institution prepares their own SLM. It is generally like notes written in simple







International Journal of Multidisciplinary Educational Research

ISSN:2277-7881; IMPACT FACTOR:8.017(2022); IC VALUE:5.16; ISI VALUE:2.286
Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:12(5), December: 2022

Online Copy of Article Publication Available (2022 Issues)

Scopus Review ID: A2B96D3ACF3FEA2A

Article Received: 2nd December 2022 Publication Date:10th January 2023 Publisher: Sucharitha Publication, India

Digital Certificate of Publication: www.ijmer.in/pdf/e-CertificateofPublication-IJMER.pdf

DOI: http://ijmer.in.doi./2022/11.12.84 www.ijmer.in

and different languages. Online learning platforms will undoubtedly face a challenge in preparing content in regional languages, as most of the content is currently available in English. It is an important step to write SLM in different languages for the benefit of students as India is a multi-lingual country having 22 scheduled languages recognized and mentioned in the constitution.

There are numerous challenges in conducting online examinations including limitations on the types of questions that can be asked, handling network and power disruptions, and preventing unethical practices. The students are indulging in cheating and submitting plagiarised answers that have become common in the past few years.

As an alternative to network and power problems especially for rural areas, many classes are done by sending pre-recorded videos through WhatsApp, YouTube and other medias so that the students can study at their convenience. But even these have their own set of difficulties like lack of understanding the lessons. As a result, they are still deprived of the knowledge they should be provided with.

The qualifications acquired through online education may not get recognized in the job market. Many industries prefer handson skills, which may be challenging to achieve through online education. Online education severely limits natural contact with instructors as contact with instructors accelerates the learning process. Online learning is feasible using the internet; however, conducting laboratory courses is still the most challenging part.

Suggestions

There is a need for concrete actions in order to improve and optimize the process of ODL, such as improving teacher's technical skills, developing training programs meant to help teachers remodel and adapt their teaching style and the way they interact with students, to the online environment.

To overcome digital divide, there is an urgent need to formulate a digital crisis response plan under the Digital India scheme to focus on unintended exclusions of the unconnected by providing free bandwidth to the students as last-mile connectivity is the need of the hour. Taking example of Tripura government's initiative, neighbourhood classes can be started for school students in remote areas who do not have television sets or mobile phones. There is a need to develop a more blended way of education model mixed with textbooks and technology.

There is a need for re-structuring ODL policies due to fast changing economy. India is now in the stage of changing economic structure and upgrading labour skills. The National Open University, OUC and IGNOU should constantly meet the national development needs, and improve their social service function.

The already existing online platforms like DIKSHA, E-Pathshala, and Shagun (e-content), and many more are being optimized to their full potential to increase the connectivity and accessibility to content. Considering the challenges presented by the pandemic, various new initiatives like Manodarpan-a platform to provide psychological support to students, iGOT portal for training module for management of COVID-19 should be expanded.

As far as SLM is concerned, the government has planned to develop e-content in eight regional languages, i.e. Tamil, Telegu, Kannada, Malyalam, Gujarati, Marathi, Bengali and Oriya. ODL are now designed according to student grades and syllabus, such as CBSE, State boards, ICSE, etc. The e-Learning platforms need to switch to provide programs in individual subjects rather than one complete module. It will help better personalize the program to match the interdisciplinary studies. Writing SLM in different languages is very helpful to all students speaking and understanding different languages. The quality of e-content should not be copy and paste. Every institution should prepare SLM in different languages. The education system in India is about to reach new frontiers; online learning needs to adapt and provide resources that suit future needs.

Digital lessons and library should be prepared and uploaded on websites of universities/institutions for the use of their students. The online and offline lectures should be recorded that can be helpful for future use. There should be regular interactions between teachers and learners through different medias. Different apps, especially WhatsApp and Telegram, are being used for sharing and providing links for various academic activities. Moodle and other platforms should be used for sharing learning materials. Moreover, mandatory training should be provided to all for using proper technology to be used in their classes. Local council and government should jointly take measures and arrange training sessions for teachers as well as parents on how to conduct online classes.







Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:12(5), December: 2022
Online Copy of Article Publication Available (2022 Issues)
Scopus Review ID: A2B96D3ACF3FEA2A

Article Received: 2nd December 2022 Publication Date:10th January 2023 Publisher: Sucharitha Publication, India

Digital Certificate of Publication: www.ijmer.in/pdf/e-CertificateofPublication-IJMER.pdf

DOI: http://ijmer.in.doi./2022/11.12.84 www.ijmer.in

The Government must allocate sufficient funds for ODL to procure modern technologies. It can empower institutes in the form of grants, so they are able to provide a seamless learning experience to students. The smart classrooms should be redesigned and lecture theatres be made compatible with online delivery and to make sessions interactive. It should be equipped with recording devices for providing access of these sessions to students later. There is a need to invest on remote labs and virtual labs to impart training to students.

In the context of education, it is important that each student, in urban and rural areas, has access to digital hardware, whether in the form of smartphones, computers or tablets, exclusively for their use. As of today, majority of students from under-privileged economic backgrounds have limited or no access to exclusive digital devices/internet/or even electricity. In this direction, UP government has planned to distribute a total of 9.74 lakh tablets and smartphones to eligible students/beneficiaries across the state with an aim is to familiarise them with the latest technology and make them technologically capable. The Punjab government had distributed basic smartphones to students of Class 11th and Class 12th. The government is also providing free digital access to students along with the gadgets, making online education more accessible.

There is an urgent to need to ensure internet access to rural and remote areas of the country. The existing infrastructure of panchayats and municipalities can be used. For example, the Uttar Pradesh government has decided to provide free Wi-Fi facility to people in 217 public places of 17 municipal corporations across the state.

The online higher education must pair the "right" course content with the "right" formats to capture students' attention. It is also necessary to develop interest among students. It should incorporate group activities and mix course formats, offering both live classes and self-guided, on-demand lessons. The areas for capacity enhancement and skill development of faculty should cover learning videos, e-content, online assessment and examination and discussion form besides integrating the Open Educational Resources with the learning materials.

To limit malpractices in online education, proper surveillance and security are needed. Proper authentication, authorization process should be followed to ensure that the right candidate is appearing for the exam in a secure environment without any malpractices. Since every exam has its own question pattern and marking scheme, it is quite challenging to incorporate all the formats in a single exam builder. The questions should be prepared in a standard format to conduct exam. There should be an introduction of advanced proctored tests for assessment and evaluation for online students.

Conclusion

One of the key tenets of the NEP 2020 is the acceptance of ODL as a mainstream delivery mechanism. The transition from traditional to digital learning has been witnessed as a smooth one. With the help of social media and other technologies, students and teachers are able to grasp online education.

It is an undeniable fact that ODL will remain an important element of present and future education and training system. ODL has its place, especially for students who could not otherwise attend college and given the health risks. In the upcoming future, ODL is going to be a part of every person's life. It's not just an option anymore but a need. With the help of new technologies, the government needs to reach out to every student and provide them with the necessities of water, shelter, and education.

As per the Regulation 22 of the UGC (Open and Distance learning Programmes and Online Programmes) Regulations, the degrees at the undergraduate, the postgraduate and, the post graduate diplomas awarded through ODL or Online mode by Higher Educational Institutions, shall be treated as equivalent to the corresponding degrees and post graduate diplomas offered through conventional mode. The method of ODL provides a more flexible and dynamic environment for the students. It has been noticed that ODL provides a more practical approach to learning, unlike the traditional norm. It has become mandatory for any Higher Educational Institutions to seek NAAC accreditation with minimum score of 3.01 or above for offering ODL and online mode programmes/courses. The concerns regarding quality and standard in ODL have already been addressed. Hence, there is no denying the fact that NEP-2020 has opened a new horizon for ODL and Online education.







International Journal of Multidisciplinary Educational Research

ISSN:2277-7881; Impact Factor:8.017(2022); IC Value:5.16; ISI Value:2.286

Peer Reviewed and Refereed Journal: VOLUME:11, ISSUE:12(5), December: 2022
Online Copy of Article Publication Available (2022 Issues)
Scopus Review ID: A2B96D3ACF3FEA2A

Article Received: 2nd December 2022 Publication Date: 10th January 2023 Publisher: Sucharitha Publication, India

Digital Certificate of Publication: www.ijmer.in/pdf/e-CertificateofPublication-IJMER.pdf

DOI: http://ijmer.in.doi./2022/11.12.84 www.ijmer.in

References

- 1. National Education Policy 2020, Ministry of Human Resource Development, Government of India. https://www.education.gov.in/sites/upload-files/mhrd/files/NEP Final English 0.pdf (accessed on 17/09/2022)
- 2. Census of 2011, Government of India. https://censusindia.gov.in/census.website/ (accessed on 17/09/2022)
- 3. University Grants Commission (Open and Distance Learning Programmes and Online Programmes) Regulations, 2020. https://www.ugc.ac.in/ugc notices.aspx?id=MjkzMg==> (accessed on 17/09/2022)
- 4. Over 2.45L tablets, smartphones distributed in UP. https://www.dailypioneer.com/2022/state-editions/over-2-45l-tablets---smartphones--distributed-in-up.html (accessed on 17/09/2022)
- Covid-19 deepens digital divide: How to upgrade rural education system in India. https://www.indiatoday.in/education-today/featurephilia/story/covid-19-deepens-digital-divide-how-to-upgrade-rural-education-system-in-india-1720376-2020-09-14 (accessed on 17/09/2022)
- Free WiFi to be made available in 217 spots of 17 municipal corporations: UP govt. https://government.economictimes.indiatimes.com/news/governance/free-wifi-to-be-made-available-in-217-spots-of-17-municipal-corporations-up-govt/84634928(accessed on 17/09/2022)
- 7. Punjab: Class 11, 12 students of government schools to get smart phones. < https://www.indiatoday.in/education-today/news/story/punjab-class-11-12-students-of-government-schools-to-get-smart-phones-1601129-2019-09-20 > (accessed on 17/09/2022)
- 8. KANTAR Internet Adoption in India ICUBE 2020, June 2021. https://images.assettype.com/afaqs/2021-06/b9a3220f-ae2f-43db-a0b4-36a372b243c4/KANTAR ICUBE 2020 Report C1.pdf (accessed on 17/09/2022)
- 9. Internet availability index across India in 2022. https://www.statista.com/statistics/1232328/internet-availability-index-by-category-india/#:~:text=In%202022%2C%20India%20had%20a,and%20levels%20of%20internet%20usage. (accessed on 17/09/2022)
- 10. http://www.ignou.ac.in
- 11. https://www.indiastat.com
- 12. https://it.tn.gov.in
- 13. https://www.statista.com