



Education at the Crossroads: Digitalization of Education in India and the New India Literacy Scheme

Teresade Heikrujam,

Phd Scholar, Department of Adult, Continuing Education and Extension, University of
Delhi, teresaheiz22@gmail.com

Senior Prof Rajesh,

Department of Adult, Continuing Education and Extension, University of Delhi

Abstract:

Humanity has experienced one of the greatest shocks of the last 100 years, the coronavirus pandemic. Due to the spread of COVID-19, status quo of activities have been affected in Indian states. The COVID-19 pandemic has closed educational institutions around the world, putting academic calendars at risk. Most institutions have switched to online learning platforms to keep academic activity flowing. However, issues regarding the preparation, design and effectiveness of e-learning are still not well defined, especially in developing countries like India, where technical limitations such as device suitability and bandwidth availability pose serious challenges. Internet connectivity issues have created problems for the state in digitizing education. This connectivity also has implications for providing relevant information to people in rural areas. The immediate impact has caused confusion for people and states to strategize accordingly. This research will focus on understanding students' perceptions and preferences for online learning through an online survey.

Keywords: Information communication technology, digitalization, online learning and teaching, e-learning platforms, New India Literacy Programme.

The most cutting-edge avant-garde, digitization, has dominated modern people's lives all over the world for decades. The social, economic, political, and industrial facets of the world are significantly impacted by the technology revolution's hegemony. The invention of information transmission ushered in the digital age and the new global economy reached unimaginable heights.



The development of mass media and entertainment platforms that unite people today is a result of the commercialization of modern digital communication technology. The growing technology ambition led to the educational system switching from conventional blackboards to cutting-edge projectors.

The quick development of information technology has spurred a digital revolution in India.

Due to the global pandemic, traditional schools have been supplanted with online classes. Academics and students were originally confused by the novel approach to online education, but they have gradually grown accustomed to its methods. In response to a pandemic condition that would sooner or later have an impact on students' futures, the Indian educational ministry highlighted its concerns about the closure of schools and institutions and started to spark fresh ideas to revive the interrupted education.

The ministry of human resource development combined forces with the ministry of education to distribute free online learning resources like SWAYAM, DIKSHA Portal, e-Pathshala, and others. The government started several training programmes before the investiture of education to better prepare teachers and make sure they were comfortable in virtual classrooms. Teachers must seamlessly integrate technology into the curriculum, not see it as an afterthought, an event, or an add-on.

It is crucial that there be a positive interaction between these two educational spheres. The best technological advancements in education in recent years have been related to the future. Textbook education will not be sufficient to meet the expectations generated by other innovative industries, as the age requires more technologically and scientifically literate people. The voracious thirst for knowledge among today's curious youth was no longer satiated by conventional teaching methods. Here, the power of digital media is demonstrated by how it reaches helping hands to students and suggests their portals to a limitless supply of information.

As a result, heavy textbooks have been replaced with tons of gadgets that students can easily carry anywhere. In an era dominated by virtual manifestos, students must possess a wide range of skills. Modern educational institutions are combining both text and digital teaching, adapting their



curricula and adapting them to the needs of their students. Academics, teachers, and students need to be tech savvy and keep up with the latest innovative applications on the market. The traditional classroom environment firmly enforced a rigorous curriculum that was proven within set boundaries and timelines. On the other hand, the insatiable thirst for knowledge of modern learners has not been quenched with the help of the traditional education system.

The modern education system seeks to create a perfect symmetry between traditional and digitized learning environments. Mutual integration of these two entities is necessary to achieve the undeniable goal of benefiting students' learning comprehension. Many successful teaching methods should be reinstated by teachers. Virtual teaching platforms allow students to record and replay live classes without peer pressure on their learning pace. Compared to traditional environments, digital platforms do not have compartmentalized areas. Digitization provides a pathway to personal professional development by enabling greater digital literacy. This has helped students develop excellent hands-on and digital skills to learn, collaborate, and present their work to the world. Digital education and digital skills are readily available for hire so you're ready to take real responsibility when surfing the web. Mobility, flexibility, and negotiability are essential for employment in today's environment, where technology has become part of everyday life. As a result, improving digital literacy is inevitable. It empowers individuals to build digital identities that enable them to thrive in an ever-changing world of technology.

Literature review:

High school and middle school students in the 21st century tend to prefer a more independent and autonomous learning style. This allows them to seek information with confidence and shape their approach to classroom learning. In today's fast-paced world, students have access to information anytime, anywhere.

Information technology is a key issue as today all our daily activities are related to technology. Technology plays an important role to carry out all activities in an easy way. We are now in an era of knowledge explosion and information is everywhere. As such, traditional classroom learning is



not enough to take full advantage of the glut of information. The only solution students must try is to use their own knowledge and skills to process the information.

Warner et al. (1998) proposed the concept of online learning preparation in his Vocational education and training sector in Australia. They mainly explained his willingness to online learning from three aspects. (2) the student's confidence in using electronic communication for learning; This includes the ability and confidence to use the Internet and computer-based communications. (3) autonomous learning ability; Several studies have since been conducted to operationalize the concept of preparing for online learning. Researchers cited factors that influenced readiness for online learning: self-directed learning, motivation to learn, learner control, computer and internet self-efficacy, online communication, and self-efficacy.

To improve the effectiveness of online learning, you need to understand user perceptions. Surveys document students' positive and negative perceptions of online learning. Several studies have shown that teacher-student interactions have a significant impact on students' perceptions of online learning. Consistency in course design (**Swan et al. 2000**), ability to interact with instructors, critical thinking skills, and speed of information processing in an online environment, degree of teaching that emphasizes interactive learning, flexibility of online learning, Opportunities to engage with teachers and peers in an online learning environment, social presence, academic self-concept, skills needed to use technology (**Wagner et al. 2000**) is recognized as a strength of online learning. Effective online teaching therefore relies on well-structured course content, well-prepared teachers, advanced technology, as well as feedback and clear instructions.

In developed countries, ICT has been observed to be widely used in fields such as medicine, science, and learning, both in formal and distance education. Subject Nature and Learner Behavioral Characteristics (**Manju 2019**). There are ongoing efforts to guide innovative strategies to improve content preparation and delivery mechanisms (**Dwivedi 2019**). Despite innovative strategies, the success of ICT depends on the adaptation and motivation of teachers to the needs of learners (**Zilka 2019**). In developing countries like India, there are various efforts by governments and other IT companies to adopt different ICT formats, which present their own implementation



barriers (**Schultz 2020**). Some of the initiatives adopted relate to the use of the cloud, which has helped reduce costs associated with implementing ICT (**Google 2020**). Despite these efforts and diversifying cultures, languages and populations, a comprehensive and workable approach that best fits the Indian scenario is needed (**Phutela 2020**).

The ‘New India Literacy programme’:

The Ministry of Education (MoE) on Wednesday, 16 February, approved the 'New India Literacy Programme' for the next five financial years (2022-27) in order to integrate all the aspects of adult education with the National Education Policy, 2020 (NEP). Additionally, the ministry has chosen to use 'Education for All' rather than 'Adult Education,' since the previous terminology was not applicable to non-literates aged 15 and above. Non-literates aged 15 years and up will be covered by the scheme in all states and UTs across the country. In conjunction with the National Informatics Centre (NIC), National Council of Educational Research and Training. (NCERT), and National Institute of Open Schooling (NIOS), the aim for Foundational Numeracy and Literacy for financial years 2022 – 2027 is 5 (five) crore students at 1 crore each year using the “Online Teaching, Learning, and Assessment System (OTLAS).” Volunteerism in the form of online volunteering will be used to carry out the scheme. Face-to-face training, orientation, and workshops for volunteers are all possible. All materials and resources must be made available in digital format. The idea will be implemented through a school. Schools will be used to perform beneficiary and volunteer teacher surveys.

Data collected from an online survey:

Data collected through google forms among a total of 36 respondents: 21 boys and 15 girls, all belonging to under-graduation courses and high school shows favouritism towards hybrid mode of learning and gravitate towards online learning rather than offline classes.

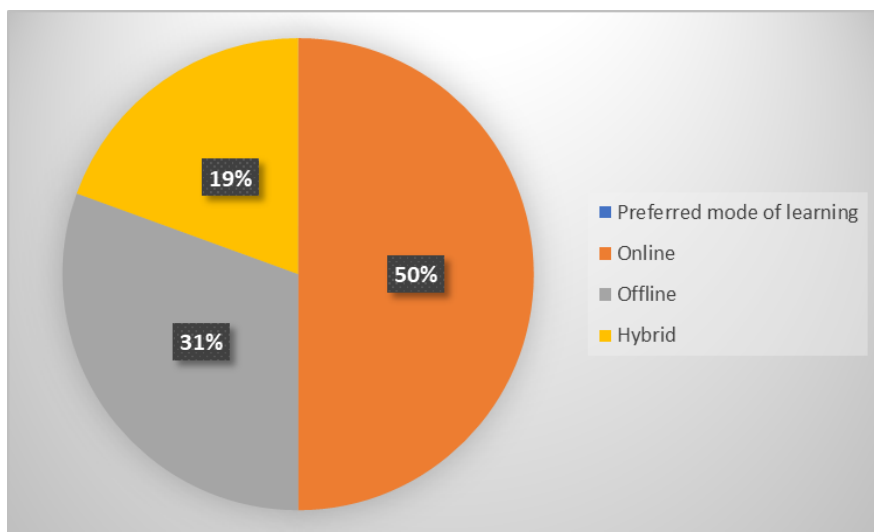


Fig: 1

Fig.1 shows the preferred mode of learning. Out of the total respondents, 19 percent chose hybrid mode, 31 percent prefers offline and 50 percent chose online mode.

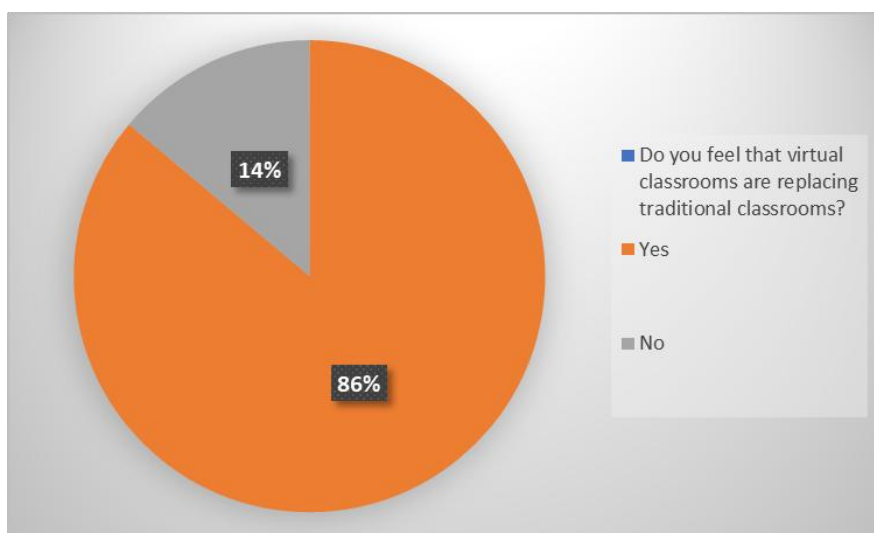


Fig: 2

Fig.2 asks the students if they feel that virtual classrooms are replacing traditional classrooms. Majority of the students, that is, 86 percent felt that virtual classrooms are replacing traditional classrooms and the remaining 14 percent felt otherwise.

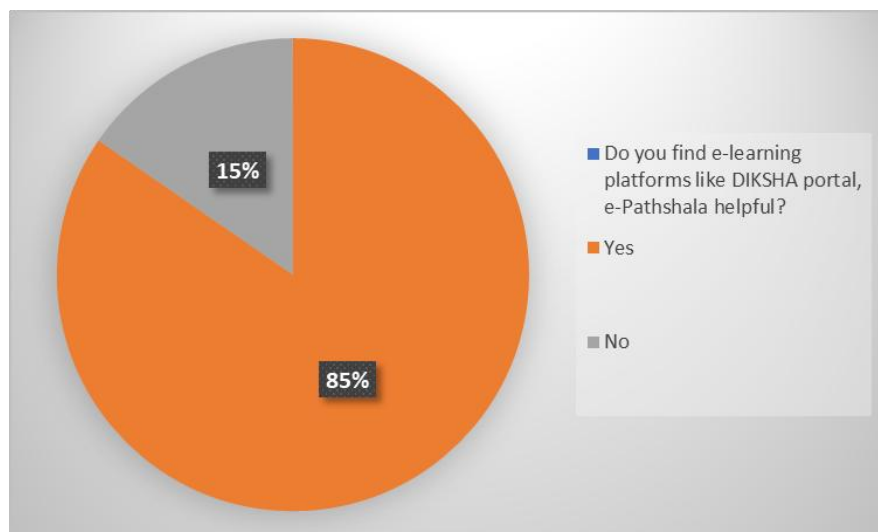


Fig: 3

Fig.3 is about e-learning and online platforms. It asks if e-learning platforms like DIKSHA portal, e-Pathshala are helpful. 85 percent believed it was helpful. 15 percent responded that it was not.

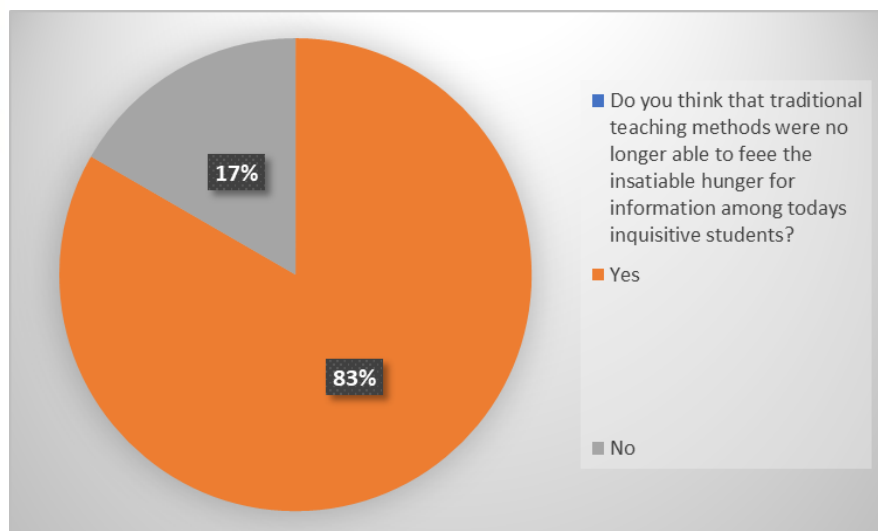


Fig: 4

Fig.4 is about traditional teaching methods. It asks if traditional teaching methods were no longer able to feed the insatiable hunger for information among students. 83 percent were with the notion and 17 percent were against it.

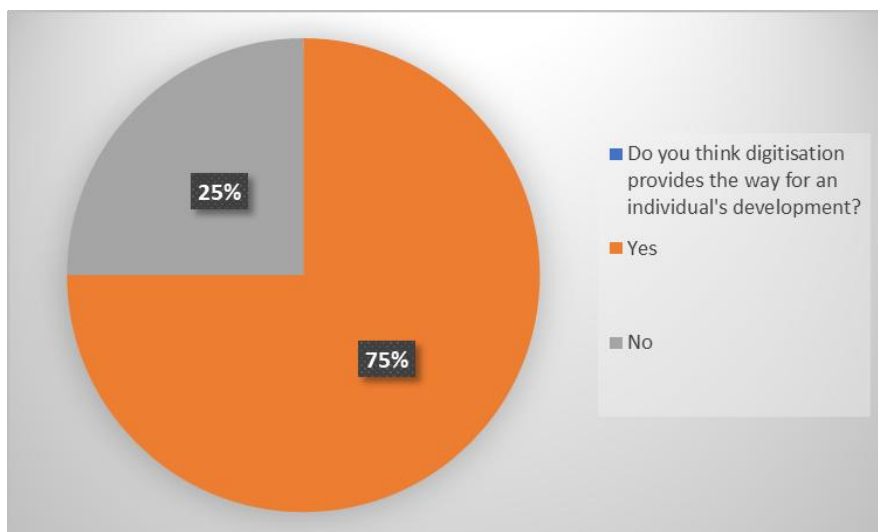


Fig. 5

In fig.5, respondents were asked if digitization provides the way for an individual's development. 75 percent felt that digitization plays an important role and 25 percent were against it.

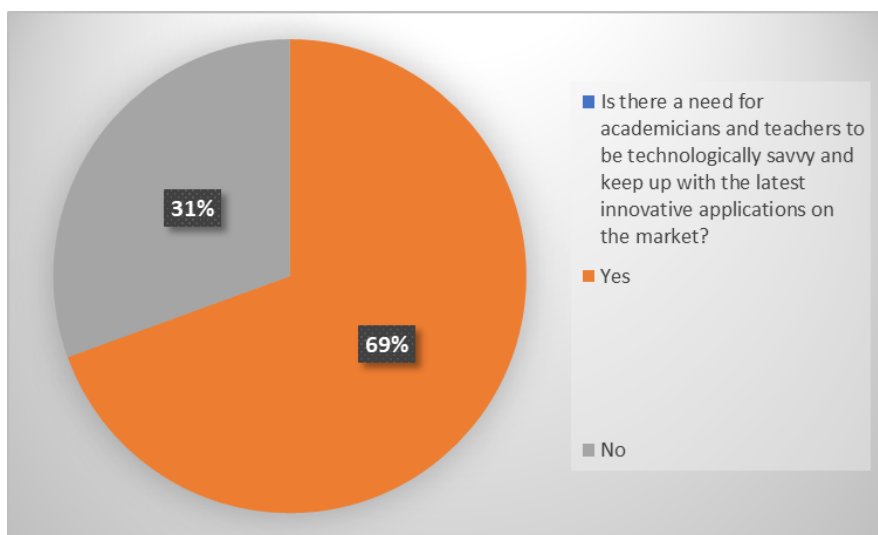


Fig.6

In fig.6, students were asked if there is a need for academicians and teachers to be technologically savvy and keep up with the latest innovative applications on the market.

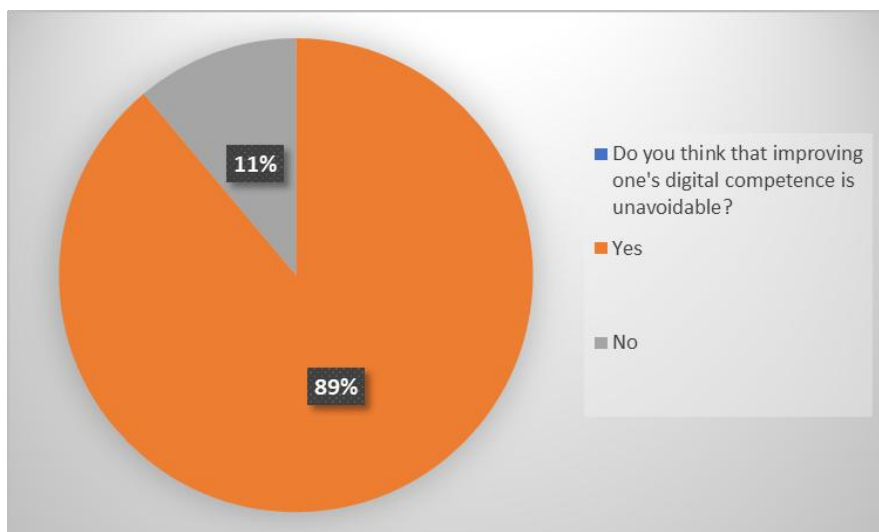


Fig.7

Fig.7 shows the students' perception about if improving one's digital competence is unavoidable. 89 percent believed it was unavoidable and 11 percent believed it was not necessary.

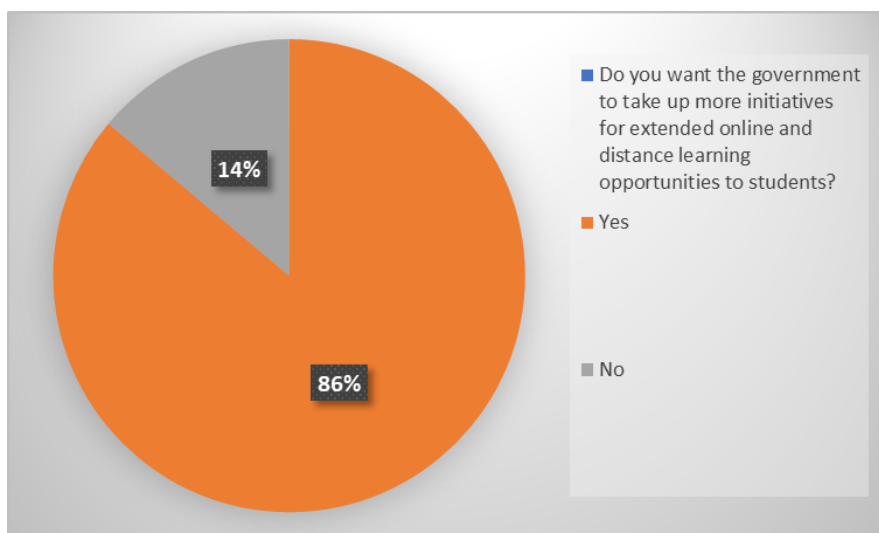


Fig.8

In fig.8, students were asked if they would want the government to take up more initiatives for extended online and distance learning opportunities to students. 86 percent wanted so and 14 percent did not feel the need of it.



India's progress towards digital education:

At universities and vocational schools, the spread of the Internet is progressing, and demand from students is increasing. Digital education has been largely driven by the government's focus on strengthening the country's digital infrastructure, including providing Internet connectivity in remote areas.

The Government of India also launched the Digital India initiative in July 2015 to enhance online infrastructure and expand Internet access for citizens (for example, by connecting rural areas to high-speed Internet networks). As part of the Digital India Initiative, the government has also launched an e-education initiative to provide online education in remote and urban areas using smartphones, apps, and internet services.

Furthermore, amid the pandemic, the Government of India has taken several initiatives (e.g., PM eVIDYA programme, DIKSHA, etc.) to promote online education for students in line with global best practices in online education and deregulation of universities. and distance learning opportunities.

Going forward, the government will do more to prepare students for the world of work by assessing their competencies and helping them adapt to industry-based skills. To achieve this, the government is encouraging colleges and universities in India to switch from traditional mode of operation to digital mode of operation.

Additionally, the government is focusing on research and innovation to find industries that can develop and support digital education programs in India. The government announced in July 2021 that India will use satellite communications and other space technologies for digital education.

Conclusion:

India joins eight other countries (including Brazil, China, Bangladesh, Egypt, Mexico, Pakistan, Nigeria, and Indonesia) to accelerate digital learning and is expected to benefit from global digital education initiatives, according to UNESCO It has been. Countries should work together to drive the shift from traditional to digital education approaches and create more opportunities in the digital education sector around the world.



The e-learning sector is getting a huge boost as Indian institutions move their operations and learning processes online.

The digitization of the education sector has also enabled children living in remote areas of the country to access quality education through interactive digital media and overcome the challenge of teacher shortages. It also helps remote teachers use technology to improve their skills and accelerate the adoption of digital learning and teaching methods in the country.

Increased involvement of private actors to deliver e-learning courses, along with government efforts to strengthen the country's digital landscape, will boost digital education, thus empowering students and opening opportunities for new technologies.

References:

Adult Education and Lifelong Learning: Theory and Practice by Peter Jarvis.

Ah-Lian, K., Eric, R., Karl, A., Jari, P., & Georges, J.P. (2019). Education in Green ICT and Control of Smart Systems: A First-Hand Experience from the International PERCCOM Masters Programme. IFAC Papers Online, 52, 1-8.

AISHE. (2019). Retrieved September, 2022, from All India Survey on Higher Education: <http://aishe.nic.in/aishe/viewDocument.action?documentId=262>

Bharucha, J. (2018). Learning and Social Software: Exploring the realities in India. Journal of Information, Communication and Ethics in Society, 16(1), 75-89.

Bordoloi, R. (2018). Transforming and empowering higher education through Open and Distance Learning in India. Asian Association of Open Universities Journal, 13(1), 24-36.

Dwivedi, A., Dwivedi, P., Bobek, S., & Zabukovsek, S. S. (2019). Factors affecting students' engagement with online content in blended learning. Kybernetes, 48(7), 1500-1515.

ET Bureau. (2018). Urban-rural mobile ownership gap: India below Pak, B'desh. Retrieved October 2022, from Economics Times: <https://economictimes.indiatimes.com/tech/hardware/urban-rural-mobileownership-gap-india-below-pak-bdesh/articleshow/65313802.cms?from=mdr>



- Guha, A. S., & Lawrniang, I. (2018). Synergising Distance Education and ICT: A Study of the State of Meghalaya, India', Stakeholders, Governance and Responsibility (Developments in Corporate Governance and Responsibility, Volume 14). Emerald Publishing Limited.
- Irrinki, Mohana Krishna Dr, "Learning Through ICT – Role of Indian Higher Education Platforms During Pandemic" (2021). Library Philosophy and Practice (e-journal). 5424. <https://digitalcommons.unl.edu/libphilprac/5424>
- Learning Through ICT – Role of Indian Higher Education Platforms During Pandemic by Dr. Mohana Krishna
- Maniu, C. S., Vlad, C., Chevet, T., Rousseau, G., Bertrand, S., & Olaru, S. (2019). Modernizing Teaching through Experimentation on UAVs Formations. IFAC-Papers Online, 52, 144-146.
- MHRD. (2012). <https://mhrd.gov.in/>. Retrieved 2022, from All India Survey on Higher Education: https://mhrd.gov.in/sites/upload_files/mhrd/files/ebook/ebook_files/annexures/Annexure-2.pdf
- Phutela, N., & Dwivedi, S. (2020). A qualitative study of students' perspective on e-learning adoption in India. Journal of Applied Research in Higher Education, in press
- Schultz, J., & Kai, G. (2020). Retrieved September 2022, from The New York Times: <https://www.nytimes.com/2020/03/24/world/asia/india-coronavirus-lockdown.html>
- Sharma, L., & Srivastava, M. (2019). Teachers' motivation to adopt technology in higher education. Journal of Applied Research in Higher Education, in press.
- Shrivastava, S. (2020). How digital learning tools can revitalise India's ageing education framework. Retrieved from <https://yourstory.com/>: <https://yourstory.com/2020/02/digital-learning-tools-revitaliseeducation-framework>
- UNESCO. (2020). COVID-19 Educational Disruption and Response. Retrieved October 2022, from <https://en.unesco.org/>: <https://en.unesco.org/covid19/educationresponse>