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Fostering Teaching Learning Practices for Quality Enhancement In Higher Educational Institutions

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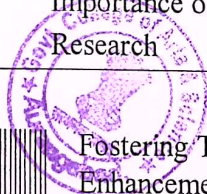**Dr. Yugandhara S. Topare**
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Challenges and Opportunities of Digitalization of Higher Education in India

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Abstract :

This paper aims to highlight the issues surrounding the digitalization of Higher Education in India. The paper deals with the issues of necessity, advantages of digitalization, challenges of digitalization in the form of paucity of internet infrastructure, lack of trained manpower, inadequacy of funding for digitalization etc. Lastly, it deals with the opportunities offered by digitalization of higher education.

Introduction :

Education plays an important role in the development of prosperous and forward-looking society. It also helps shape the personality of the individual by making them knowledgeable and skillful. With the advent of globalization, the cross-border and cross-region flows of knowledge, people and technology has increased. Modern technology has made the knowledge transfer model in education defunct and made it move towards being more collaborative and engaging. The digitalization of education has particularly made a far-reaching and deep impact on the way the exchange of knowledge takes place in the education sector.

Necessity of Digitalization :

Since the beginning of the new millennium, the modes of teaching in higher education have changed in a fundamental way. Today, almost everyone engaged in teaching activity in higher education uses some kind of modern technology to deliver content to the students. In the current environment, the faculty and students can tap into a plethora of sources like

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Google, Wikipedia, Youtube for information. The teaching-learning techniques are being transformed with the use of new technology in the form of internet, video conferencing and satellite transmissions. Many higher educational institutions have tied-up with foreign universities to offer high-quality online education.

Advantages of Online Education :

- Online Education leads to saving of time and money.
- Facilitates easy transfer of knowledge from teacher to student.
- Online exams can be conducted easily and their results can be obtained quickly.
- It creates interest among students and facilitates learning of new concepts.
- Students are enabled to prepare project work and make presentation online.
- It eases the hassles of communication between the educational institutions and parents.
- Students get notifications regarding their assignments, projects and other events at home and can prepare and submit assignments and projects from home.

Challenges in Digitalization of Higher Education :

1. **Internet infrastructure and connectivity related challenges :**
   Internet infrastructure and connectivity is poor in many parts of India. Most of the population is also technologically illiterate and do not have access to internet. This makes it very hard for the students particularly those in the rural areas to participate in online teaching-learning activities. It also leads to depression and anxiety among sincere and hardworking students.

2. **Paucity of trained Man-power :**
   Many of the teachers in rural areas and also some in urban areas are not well-versed in the use of digital technologies. There is also considerable apathy among large sections of teachers towards digital technology. It results in dearth of manpower trained in digital tools in the higher education sector.

3. **Challenges related to pushing content in different languages :**
   In a multilingual country like India, language poses a hindrance to the digitalization of education.
   The translation of the digital content into all the regional language is a challenging task.

4. **Inadequacy of Funds :**
   Digital Education requires constant adoption of latest hardware and software coming into market. However, it becomes very difficult to incorporate new technology for digital education due to requirement of huge funds. These funds are not available to the middle and low-rung institutions.
   Many of these institutions also have low-paid teachers, hiring freezes and are closing down many of the courses and programmes. It might seem a contradiction that many of these institutions of higher education are looking at online education to save funds.

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5. **Neglect of upkeep and upgradation of equipment for digital education :**
The maintenance and upgradation of digital equipment becomes quite difficult due to paucity of funds. After the initial grants for the new digital education projects are exhausted new funds are not forthcoming which results in the tools and equipment for digital education falling into disrepair.
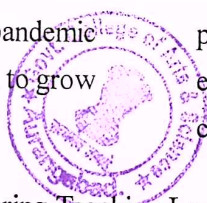
Opportunities for Digital Education in India :

1. The Government of India has launched a Rs. 1.13 trillion Digital India Initiative. Under this campaign,the government aims at providing government services digitally to citizens through improved infrastructure and by increasing internet connectivity. This will be highly beneficial for the growth and expansion of digital education in the country

2. There is a huge requirement of skilled manpower in various sectors of the economy. E-learning and digital education too have a role to play in training and equipping the future job market entrants.

3. Internet penetration in India is 16%. This number too is likely to increase greatly in the future. This will definitely increase the opportunities available for digital education.

4. The expected growth in e-learning sector in India was 17.4% between 2013 and 2018. With the onset of corona pandemic the e-learning sector is expected to grow even further.

5. In order to take advantage of these opportunities the higher education institutions can have the improvement in e-learning through connected campuses. These institutions also need to erect digital infrastructure to address the large-scale reach. The higher education institutions can enable their campuses with WIFI, IT security, Cloud Surveillance and Software Applications.

6. The Internet of Everything enabled by WiFi, cloud surveillance and software applications learning can help the educational institutes to save costs and collaborate on research projects. IOE will also facilitate the learning by students by connecting to resources around the world. IOE will also deliver value through collection of data for making better decisions and reducing expenditure on instructional resources.

7. The National Mission on Education through Information and Communication Technology Scheme envisages to leverage the potential of ICT for teaching learning process. Content generation and provision of connectivity are to institution and learners are two key components of this scheme. 419 university level institutions and 25000 colleges are to be provided connectivity under NMEICT.

8. According to online reports, there is a tremendous increase in the number of people taking online courses. Digital education has the advantage that the created resources can be used multiple

times in the future. This saves a lot of resources and efforts. Digital Education also allows teachers to customize educational products according to the requirement of students.

9. The smart technologies are changing the higher education scenario in the country. The digital education is now spreading in the hinterland / rural market. Affordable internet connectivity is allowing the students in rural areas to take up online courses and improve their skills and knowledge.

10. Massive open online courses are facilitating self-learning in a major way. They are aiding the youth in the country to enhance their skills and knowledge. It is providing them with affordable education and improve their employability. Students in professional courses and working executives can upgrade their skills to leverage career opportunities in specific areas. Moocs provide equitable access to high-quality online learning material and content to all the stakeholders.

11. Social media as a learning tool has progressed in a big way in India. Today, social media has become an integral part of the digital education. It can play an important role in the exchange of information. Social media also generates networking and employment opportunities in a cost-effective way.

12. Today teaching & learning is no longer confined to the traditional class-room set-up due to the introduction of interactive devices such as flipped class-rooms and mobile apps. Educational institutions need to adopt these technologies in a big way to improve the quality of the learning experience.

13. Videos-based instructional learning is gradually gaining traction in the education sector. This medium is highly interactive in nature. Learning based on this medium is not just confined to audio-video but also includes e-books, educational apps and podcasts etc. students are always excited to learn new concepts using digital media.

Conclusion :

There is no doubt that digitization of education is the need of the hour in order to keep up with the global trends in higher education. However, the digital education and tools associated with it must be adapted to the to India's unique social and cultural landscape. The need for protection of youth from behavioural and psychological imbalances due to the dependence and addiction to electronic medium of information sharing must be kept in mind. At the same time, we must go for the blend of traditional and modern teaching-learning methods to preserve the relationship between the teachers and the learners. It can be said that the onset of digital education has thrown up huge opportunities to leverage India's demographic dividend and propel India towards becoming an advanced and knowledge based economy and society.

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