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The Necessity Of Incorporating Digital Learning Into Postsecondary Education: Prospects And Obstacles

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Abstract

In essence, digital schooling is a contemporary creation. It is the part of the educational system that has been digitalized. This research aims to provide thoughtful analysis of the promise and challenges of digital education and information and communication technology (ICT) in relation to implementing the newest technical developments and long-term open online courses.Global unfettered access to information was facilitated by the digital revolution.Amidst digital transformation, disruptive technological advancements, and rapid change, the higher education system has to leverage the potential of information and communication technology (ICT) to remain competitive and deliver top-notch instruction. In order to achieve these goals, the problems that higher education faces are discussed in this article, along with the technical tools and approaches that have been employed in the contemporary environment to help higher education embrace digital transformation. The goal of this study is to provide important ideas that will be useful for the current and near future digitization of higher education.

Keywords: Higher Education; Digital Education; Technology; Teaching and Learning.

Introduction

The current trend toward modernization in society and technology has resulted in a number of notable alterations to institutions.The embrace of technological advancements by institutions has resulted in a fundamental shift in the way technology is perceived as a dynamic and interconnected environment that promotes digital learning.In this way, the focus is placed more on the students than the technology itself, in addition to the learning possibilities it offers. In this sense, higher education institutions must digitize if they hope to attract a larger and more diverse student body and improve the overall caliber of their curricula, teaching resources, and training initiatives.The European Commission unveiled the Digital Education Action Plan in January 2018 as a follow-up to the Gothenburg Summit in November 2017, where the Parliament, the Council, and the Commission discussed reducing socioeconomic inequalities and strengthening Europe through education and training.

Education is being forced into unknown territory by the increasing use of digitallearning technology. Higher education establishments must adapt their instructional technology solutions to students' needs while instructors must reconsider what it means to deliver a learning experience.For both instructors and students, digital learning is vastly better to the traditional classroom paradigm in many respects. Teaching and learning may take place whenever and wherever is most convenient for all parties. Of course, there are drawbacks to digital learning in addition to its advantages.

This study explores the definition of digital education and its application to higher education. It also draws attention to the difficulties and chances associated with incorporating digital learning into institutions of higher learning. Furthermore, digital higher education may be accomplished through the application of technical tools and methods.Particularly in the wake of the COVID-19 epidemic, all higher education instructors and decision-makers were keeping a careful eye on the necessity of digital transformation in higher education. Our goal in this study article is to examine the primary benefits and drawbacks of implementing digital education.

According to the authors, there are still obstacles in the way of digital transformation and digitalization reaching the necessary level of maturity.

Digital Education

Digital education is the creative use of digital tools and technology in the classroom.Teachers and students will both gain from this creative application of digital technology. Educators that experiment with new ideas find more sophisticated and effective ways to teach kids. This promotes involvement and makes learning fun.Digital technology plays a major role in the academic notion of teaching and learning. Innovations in technology, such computers, smartphones, and the internet, have had a big influence on businesses and people's lives.

Digital computerized facilities are available in higher education institutions to support virtual organization and management and organizational oversight of instruction and learning.There have been notable changes in the roles of instructors and students, inclusive access to postsecondary education, the creation of new knowledge, and the accessibility of lectures and learning materials.The changes in teaching and learning in higher education brought about by the integration of digital technology are centered on a continually changing and diversified range of resources.

Because they support students in their daily social interactions and have the potential to promote more shared learning processes and student autonomy in learning, Web 2.0 tools and other internet-based online equipment, like social media tools, have revolutionized education.Aresta et al. claim that mobile devices—such as laptops, smartphones, digital book readers, and smartphone apps—have grown in importance in higher education as tools that

affect and facilitate interactions between students, instructors, and peers.Additionally, educational spaces have been renovated, enabling the substitution of virtual and augmented reality or simulation-based laboratory equipment for actual lab experiments.

Due to the shift in "time for learning" brought about by digital technologies and learning settings, education is now "all the time.The constant advancement and use of digital technology in higher education settings has raised worries about how these tools will revolutionize, enhance, and support education. In order to better comprehend how technology has changed students' learning, it is important to look back. Publications present real research on the application of contemporary technologies to improve higher education students based on the following digital ideas in order to map new technologies and usage patterns.

Education, Teaching and Technology

Despite the long history of using online teaching and learning, the outcomes are still insufficient. Due to their unusual teaching methods, a number of instructors have rejected to employ online teaching tools.Persuading instructors to change their pedagogical approaches or styles of instruction is one of the biggest obstacles.Baran's analysis of effective e-learning tactics revealed the importance of teachers and the format of their participation positions.

Using real-time, live internet transmission to carry out the teaching-learning process is known as "live online learning."Information technology (IT) departments have provided institutions with technology transfer, infrastructures, and online teaching tools to facilitate real-time instruction and online learning.Certain research claim that it's the students' perspective of the delivery, their level of independence in learning engagement, and their confidence in utilizing knowledge flow.Digital instruction and appropriate platforms for live-streaming instruction were employed in several research.Therefore, further study is required to ascertain if postgraduate and degree-seeking students in the higher education sector are ready for live digital instruction.

The Role of ICT

All modern computerized development professions are seen as beneficial to individuals, organizations, and companies by **Information Communication Technology**. ICT has long been a useful tool in the educational sector. The use of technology in assessment began in the 1920s when Sidney L. Presses invented an automated testing machine.ICT has been welcomed by higher education institutions, despite the fact that we recognize that its usage is essential for the development and advancement of both teachers and students.According to UNESCO, ICT is presently permeating the educational environment and assisting in the 21st century's success of education. ICT is useful for organizing, improving, and managing learning in educational settings. Technologies are a major driver of innovation and growth in

both industrialized and developing nations.ICT benefits are shown from a variety of angles and have aided in the process of learning. Additionally, they have opened up education to anybody who can foster a positive learning atmosphere, promote effective information delivery, and quickly respond to a variety of issues that bother educators and students.

Challenges of Digital Education

There are many advantages to digital education, and it opens up new avenues for excellent education.

1. **Digital Literacy**: Proficiency in digital literacy is crucial for efficient online learning. In an online school, students cannot achieve without these cutting-edge technology; they can also cause the program to stop entirely when they or the teaching assistants use them.
2. **Lack of Teacher-Student Direct Interaction**: Debate opportunities exist before and after classes, during office hours, and during random encounters in the corridor. These are not accessible for use in online learning.
3. **Need For Self Discipline**:There are opportunities for debate before and after courses, in the office, and at random times in the hallway. You cannot utilize these for online education.
4. **Technological Obstacles**:Not every youngster in this generation of "digital natives" has had the same level of access to the internet.Some individuals only have restricted access to the internet or Wi-Fi, even if all of their information comes from their phone plan.
5. **Meetings Deadlines**:Despite being connected to the self-control element, this topic is deserving of its own entry. One of the main benefits of this approach is that it allows students to learn at their own speed.
6. **Digital Education is Not Appropriate for Practical Sessions**:In higher education, digital and e-learning are not compatible with assessment activities.Rather of prioritizing the enhancement of practical skills, most providers of digital material choose to focus on developing theoretical knowledge.Several studies have shown that teaching practical competences and hands-on skills through digital education is unsuitable.

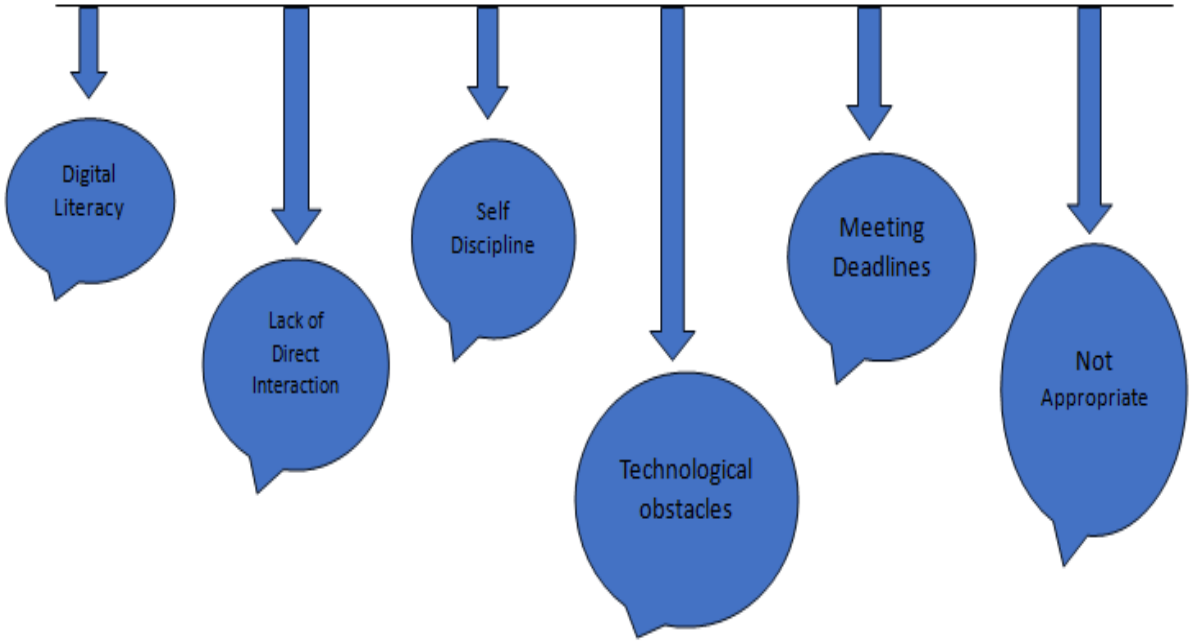

Figure-1 Digital Education Challenges

Opportunities for Digital Education

When it comes to a nation's chances of being competitive and of producing living things, education is the most important factor. There are some fantastic prospects in the world of education provided by the knowledge revolution.

1. **Improving Teaching and Learning**
   All of our children and young adults will benefit from improved educational perspectives thanks to digital technologies. Most studies examining the effects of digital education on learning found that it amplifies the significance of educational advancement and the development of high-tech skills.
2. **Growing Returns on Investment in Higher Education**
   Financial trends have aided in the rise of new businesses and the reduction of employment, particularly in high-end sectors. Because of this, innovation is crucial in a workplace that is both international and competitive.
3. **Increasing Parental and School Engagement**
   Positive study suggests that communicating with parents directly using digital tools and software will improve learning and boost student adherence to participation and conduct criteria set by teachers.
4. **Reducing Inequality**
   The growth of ICT and worldwide interconnectedness may lessen the digital gap, accelerate the pace of education, and foster the development of knowledge-rich

society in a variety of contexts.Providing online access to creative courses and rich content would gradually lessen the disparity in obtaining the necessary knowledge. However, these studies also shown how modern digital tools are easier to use, which will eventually help to lessen the issue of the digital divide in education.

5. **Anywhere and Anytime**

   Every day, students in today's classrooms use personal devices for learning, exploration, collaboration, and communication. In a vehicle, at home, on a train, or in the corridors of the school. They continue to pay attention to their environment. Due to their extensive exposure to digital technology, students find it simpler to use it for many other aspects of their lives, such as reading and writing, and to share their goals on social media and to follow their favorite celebrities on Twitter.

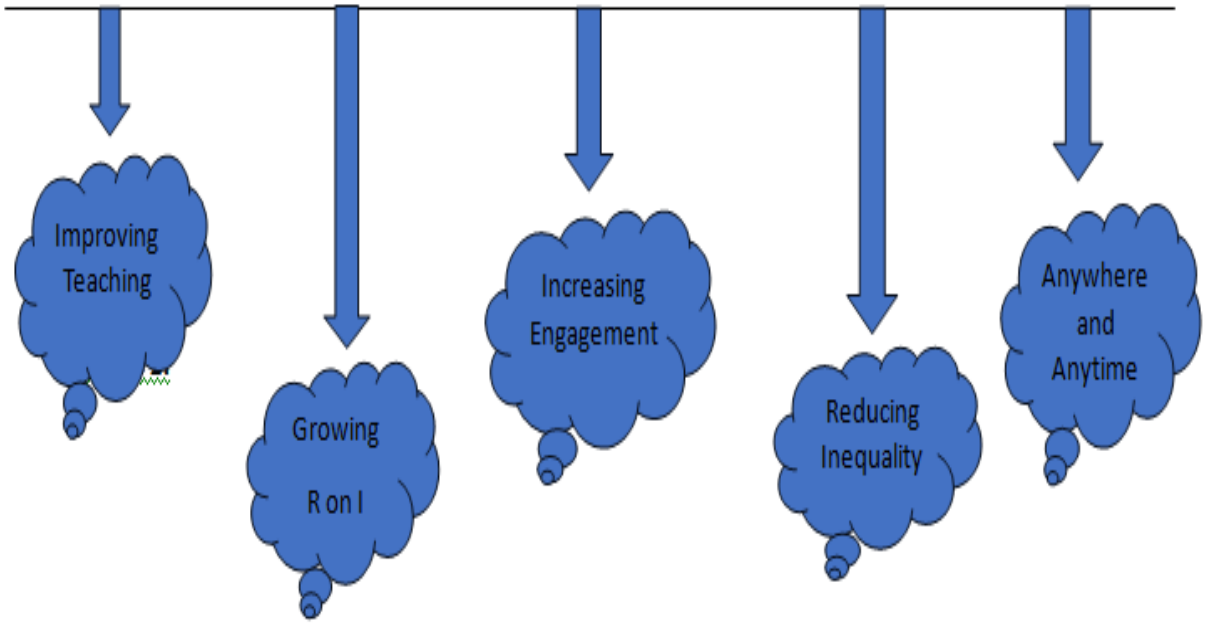

Figure-2 Opportunities for Digital Education

Discussion

Three main ways for developing learning in higher education were discovered after evaluating the numerous approaches, low-impact , medium-impact , and high-impact approaches.These tactics have been divided into low-, medium-, and high-impact combinations according to potential changes to the existing teaching approach and the educational background of the students.Assessment results show a consistent and significant increase in the adoption and growth of digital education spaces, despite widespread assumptions that this is a progressive development. This underscores the need for more

deliberate planning and implementation of digital learning, as well as a greater awareness of user preconceptions. The goal of the current study was to evaluate how students' experiences with teaching and learning were impacted when a VLE was used to support the delivery of online panels.

Conclusion

There is an immediate need to alter the way education is taught in schools in order to better prepare pupils for the rapid growth of technology.These modifications bring about a number of advantages and disadvantages for the advancement of digital education.In an era where a critical legal project to redefine the institution's role in reshaping distant learning and digital learning in higher education is being considered, the educational system has to aggressively pursue the objective of defending its position as a leader in quality and innovations.Research has consistently examined the benefits of promoting students' active engagement in the learning process both within and beyond the classroom. All things considered, better student learning outcomes and procedures were more commonly linked to the use of all digital technology categories.Our aim is to make a valuable contribution to the current discourse and investigation about the utilization of digital technology in higher education.

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