

Identifying the Benefits and Challenges of Digital Technology and Online Learning

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Citation: Sharma, L. R. (2022). Identifying the benefits and challenges of digital technology and online learning. *International Research Journal of MMC*, 3(2), 26–32. <https://doi.org/10.3126/irjmmc.v3i2.46297>

Abstract

Online learning, an internet-based learning, is also termed as e-learning which takes place in virtual environment. It has been possible due to the digital technology. It has become more influential in the recent years. We have not only been benefitted from this learning, but we have also undergone with its potent challenges. The principal objective of this research article is to identify the benefits and challenges of digital technology and online learning. This article is based on the qualitative research in which secondary data were basically taken from different journal articles. It is a review article prepared by going through the journal articles based on the digital technology and online learning. This article winds up with the conflicting remarks regarding the use of digital technology employed in online learning. Overcoming the challenges and difficulties of digitalization will undoubtedly result in learning efficiently.

Keywords: Benefits, challenges, learning, online, technology

1. Introduction

Digital technology, an extensive term, grips all electronic devices, automatic systems, technological tools and resources that generate process and store information. It refers to systems, hardware, and processes that use digital data or signals to generate a specific set of results. In recent years, digital technology has revolutionized almost every area of human existence, including communication, education, work, travel, banking, shopping and entertainment. It has played a momentous role in the field of teaching learning activities.

Online learning has democratized education by making learning possible beyond the narrow rooms and premises of campuses and universities. It has enabled students to study or learn from anywhere and to attain knowledge from any parts of the world. It is frequently prevalent in higher education for enabling the learners from diverse geographical territories to learn things. Even schools are compelled to run online classes due to Covid-19 pandemic. It indicates the acquisition of knowledge which takes place through electronic technologies and media.

Although there are some benefits of online learning, it has made almost all the teachers and the students face some problems in the teaching learning process. The teachers and the students in the rural areas experienced much more problems due to frequent electricity cut off, poor internet service and lack of technological knowledge than those in the urban areas in Nepal. The previous research studies revealed that the teachers and the students had heterogeneous attitudes towards online learning. Whatever their attitudes may be, online learning is the demand and requirement of time and the inevitable situation. This article writer feels the necessity for pinpointing some benefits and challenges of online learning with the purpose that the teachers and the students will attempt their best to be benefitted from it by removing such challenges in the days to come.

2. Review of the Relate Literature

Literature review includes benefits and challenges of digital technology and online learning.

2.1 Benefits of digital technology and online learning

Online learning is the use of digital technology, and it has a wider use. It is used for academic research and administrative activities (Rumanyika & Galan, 2005). It has the ability to obliterate the barricades to education generated by space and time. Several studies claimed the benefits of digital technology in terms of its contribution to (a) knowledge construction (Chang & Hsu, 2011; Cheng, Hwang, Wu, Shadiev, & Xie, 2010; Hsu, 2012) ; (b) enhancement of learning (Abdous, Face, & Yen, 2012; Sandberg, Maris, & Geus, 2011; Stockwell, 2008) and (c) providing novel, creative and entertaining learning contexts (Song & Fox, 2008) . Additionally, digital technology has drastically transmuted the teaching and learning of English as a second/foreign language (ESL/EFL) which purportedly support teachers to personalize their teaching (Oberg & Daniels, 2013), enable group work and produce collaborations among learners (Pemberton, Winter, & Fallahkhair, 2010) , enrich learner self-sufficiency (Murphy, Bollen, & Langdon, 2012), surge engagement in learning tasks and in generating problem-solving tasks (Cook, 2010; Driver, 2012) and promote teachers to provide prompt feedback (Voelkel, 2013). A plethora of research finds that digital technology meets not only the varying necessity of higher education students, but it also improves learning (Alzahrani & Seth, 2021; Toit & Verhoef, 2018; Waghid & Waghid, 2016; Becker, 2017; Lai & Chen, 2011).

Online programs are perceived as operative forms of teaching during the COVID-19 due to several benefits for students such as time investments, cost savings, and flexibility (Motte-Signoret, Labbé, Benoist, Linglar, Gajdos, & Lapillonne, 2021). The issue of the COVID-19 and its influence on the higher education is an emergent topic of global discussion. Several studies have been steered recently to explore the efficiency of e-learning in educational sectors globally (AlAzzam, Abuhammad, Abdalrahim, & Mansour., 2021; Mohr, Kirsch, & Fotopoulou, (2021; Mishra, Gupta, & Shree., 2020). However, many studies have not been completed to scrutinize the factors for the effectiveness of the online mode of classes and perception of faculties and students during the COVID-19 pandemic in Nepal (Chaudhary, et al., 2021; Dawadi, Giri, & Simkhada, 2020; Neupane, Ahmed, Pervez, Ashraf, & Majeed, 2020; Tuladhar, Pradhan, Parajuli, Manandhar, & Subedi, 2020). Online education is highly beneficial in promoting online research, connecting the practitioners to the global community, getting huge and authentic resources of knowledge required for professional and academic endeavors, and making them self-disciplined (Poudel & Subedi, 2020) . However e-learning in Higher Education Institutions in Nepal met a few impediments during the pandemic mode, many authors in several studies held that this type of changeover of conventional to online teaching-learning mode undoubtedly provides abundant opportunities for learners and teachers (Koirala, Silwal, Gurung, Bhattarai, & KC, 2020) . Neupane (2017) states that technology aids create a community of practice where learners of English, through interactions and collaborations, attain language aptitude, advance critical and problem-solving skills, upsurge their engagement and preservation, and achieve higher academic success. Some benefits of online learning can be drafted in the following points:

- i. Online learning increases the convenience, access and flexibility of courses for teachers and students. These courses can be attended and delivered anytime, anywhere, eliminating the need for them to travel to specific locations in bad weather.
- ii. Online education generates a fun and interactive situation for all classroom participants and is more beneficial to students who are shy to ask question. The students who are shy and unable to express themselves can also express their questions in writing.

- iii. Successful online courses also tend to improve student retention and satisfaction. We can also pursue our own interests from home or from our side. Online learning opens the door to different opportunities for students to easily improve their skills in different directions.
- iv. Teachers also have various incentives. New technologies such as casting can be used to make lectures more interactive for students. Online learning is also supported by multimedia content, virtual reality and augmented reality.
- v. Online learning extends reach to a wide range of audiences. These courses are not limited to students admitted to the university campus. Instead, they are equally beneficial to students in other corners of the world. This is the main reason why online learning has become so popular.

The preferences of online learning can briefly be pinpointed as efficiency, accessibility of time and place, affordability, Improvement in student attendance, and suitability to different learning styles.

Despite the several benefits of digital technology and online learning, some research studies carried out in Nepal show that the live class room learning was more effective than the online one. The online class room was not as effective as live class room according to data collected from Nepalese dentistry colleges (Shrestha, Ghimire, Acharya, Singh, & Sharma, 2020) . Lumbini Medical College 226 Students, Nepal, responded that online classes were worse than traditional classroom teaching (Nepal, Atreya, Menezes, & Joshi, 2020). Likewise, akin results were recounted on the issues of electricity and internet access among nursing students (Koirala, Silwal, Gurung, Bhattarai, & KC, 2020; Thapa, Bhandar, & Pathak, 2021).

2.2. Challenges of digital technology and online learning

Higher education institutions have normally succeeded in applying teaching and learning activities using online tools globally, but the systems and resources in developing countries such as Bangladesh and Nepal are insufficient (Dawadi, Giri, & Simkhada, 2020; Uddin, 2020) . University teachers in emerging countries often resort to using accessible technological resources to cope with the challenges and to advance their teaching and learning (Shah, Mann, Singh, Bangar, & Kulkarni, 2020). Mohammadi, Radfar, and Pak, (2021) , in their study in Afghanistan found out that lack of policy, guidelines, and detailed policy documents was one of the key challenges for implementing digital technologies such as the learning management system (LMS) in higher education. Similarly, in resource-constrained contexts, using technology in higher education is still a challenge (Stantchev, Colomo-Palacios, Soto-Acosta, & Misra, 2014). There are two sorts of obstructions that mitigate against effective employment of digital technology in teacher education: first obstruction is lack of resources and training, unconducive policy and administration, rigid curriculum and assessment, and the second one which relates to teachers' own beliefs, motivation, and attitude towards technology (Laudari & Maher, 2019).

There are several challenges of digital technology and online learning. Some of them are as follows:

- i. Getting used to the practice of online learning can be a bit difficult and complicated for teachers and trainers who use traditional teaching methods.
- ii. While teaching online, it is a bit difficult for teachers to understand the learning abilities of individual students. Creating an interactive environment in the classroom is difficult because teachers and students rarely know each other.

- iii. Students unfamiliar with online technology can be confused. If this happens, the teacher will need to communicate the deadline and make special efforts to help the student complete the assignment.
- iv. Online learning does not require advanced technical skills, but stakeholders should be familiar with the use of computers and Internet access. In rural areas, slow internet connections and lack of resources can be frustrating.
- v. Teachers often need to rethink their course design and adopt different education, engagement, and evaluation strategies in an online environment. In contrast to campus courses, which are held once or twice a week, online courses are open 24 hours a day, 7 days a week and learning is continuous in an asynchronous environment.
- vi. Building a comfortable learning environment or community sense in an online environment is a challenge. It is important for students and teachers to think about ways to get to know each other and stay connected.
- vii. Students who are unfamiliar with the online environment or who are less motivated or motivated can be delayed or confused. You can master this assignment by organizing lessons and clearly communicating deadlines and assignment deadlines.
- viii. No advanced technical knowledge is required, but it is important to be confident in navigating the Internet using a computer. A slow connection can be frustrating to access the course's platform and materials.

For many students, one of the biggest challenges of online learning is the difficulty of focusing on the screen for long periods of time. It also makes it easier for students to get distracted by social media and other websites. Therefore, it is imperative that teachers make their online lessons crisp, engaging and interactive so that students can focus on the class. Online courses are internet connectivity. Without a continuous internet connection for students and teachers, children can lack continuity in learning. However, online courses minimize physical interaction between students and teachers. In this situation, it is imperative that the school allow other forms of communication between students, peers and teachers. To counter this, it is important for schools to invest in training teachers with the latest technology updates to ensure that online classes are offered seamlessly. Many parents are concerned about the health risks of having their children stare at the screen for extended periods of time. This increase in usage time is one of the biggest concerns and drawbacks of online learning.

3. Materials and Method

This is a review article which employs the digital technology and online learning as study materials and these two aspects are taken under consideration from the perspectives of their benefits and challenges in a real life situation. This article is grounded on the qualitative secondary data that are primarily elicited from journal articles. It is prepared by adopting the qualitative descriptive research method.

4. Conclusion

This is an era of science and technology. The use of digital technology can be seen in divergent fields of human activities as in banking, communication, teaching and learning, travel and tourism, business, entertainment and so on. Different soft wares which are used in teaching and learning online are the influential gifts of digital technology. There are pros and cons of digital technology and online learning. There are some challenges in employing the digital technology and online learning in a real life situation. Despite the demerits and challenges, we are bound to follow them because of the requirement and obligation of the present time and situation. We need to face and overcome the challenges and difficulties of

the digital technology and online learning for attaining more benefits from these digital assets, and for learning more effectively by using them dexterously.

5. References

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