Identification Opportunities and Challenges of Distance Learning Based on E-Learning in Education Process

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ABSTRACT

The COVID-19 pandemic has imposed a lockdown which has resulted in many university turning to distance learning via e-learning. The high use of e-learning attracted researchers to conduct a survey of the advantages and challenges of using e-learning for the learning process during the COVID-19 pandemic. Such studies have been conducted in Mexico (Lytras et al., 2022) , United Arab Emirates (Mushtaha et al., 2022) , Chile (Pérez et al., 2023) , Turkey (Topuz et al., 2021) , European Union (Luyben et al., 2020) . This study aims to analyze the advantages and challenges of using e-learning for the learning process during the COVID-19 pandemic at various universities by comparing existing research. The research was carried out through the literature study method which was obtained through ScientistDirect and GoogleScholar. The results of the research show that the advantages of e-learning based distance learning are time and place efficiency, replaying learning videos, ease of research methods. Meanwhile, the challenges are difficulties in accessing the internet, mental health disorders, loss of experience or practical learning, learning centered on educators. In addition, theoretical college students experienced increased productivity and high learning motivation while technical college students showed increased productivity and low learning motivation.

Key words: e-learning, opportunities and challenges, distance learning, educational process

INTRODUCTION

The spread of COVID-19 was declared a pandemic by the World Health Organization (WHO) on 11 March 2020. The COVID-19 pandemic has affected various fields, one of which is education. Based on UNESCO statistical data, the COVID-19 pandemic has caused major disruptions to the learning system in history. The implementation of global lockdowns and quarantines resulted in the closure of educational institutions. The closure of educational institutions impacted the student population of 1.6 billion students from 190 countries (UNESCO, 2020). This hampers the learning process. The COVID-19 pandemic has indirectly revolutionized global education with technology. Technology is a facilitator that supports students to play an active role in learning to achieve better learning outcomes (Onyema et al., 2019) . Beside that, technology can turn traditional education into virtual education. Many universities are taking action to change educational programs, by shifting to distance learning. Various innovations and technology-based solutions were intensively developed during the COVID-19 pandemic (Divjak et al., 2022) .

Distance learning is carried out through e-learning. E-learning is a futuristic educational method that accommodates the expectations and needs of its users. Based on research by Stecuła & Wolniak, (2022) , shows two categories of e-learning used, namely online learning applications, web meetings (zoom). The implementation of e-learning requires students and educators to use high-tech platforms and tools. This step was taken to maintain the continuity of the educational process and high academic standards. Distance learning through e-learning emphasizes learning independence. Distance learning through e-learning has many advantages and challenges. The use of e-learning in various universities is very high, the high use of e-learning during the pandemic attracted researchers to conduct a survey regarding the advantages and challenges of using e-learning for the learning process during the COVID-19 pandemic. Research has been carried out in various theoretical and technical colleges. Research is carried out both in theory-based and practice-based fields of study such as the midwifery study program. Research regarding the advantages and challenges of using e-learning for the learning process during the COVID-19 pandemic has been conducted in Mexico (Lytras et al., 2022) , United Arab Emirates (Mushtaha et al., 2022) , Chile (Pérez et al., 2023) , Turkey (Topuz et al., 2021) , European Union (Luyben et al., 2020) . The research was conducted through an electronic questionnaire which was sent via e-mail to the relevant student. The research quisoners have the same questions which include replaying learning videos, time and place efficiency, ease of research methods, difficulty accessing the internet, loss of experience or practical learning, teacher-centred learning, mental health disorders.

These studies are important to do to identify the advantages and challenges of using e-learning for the learning process during the COVID-19 pandemic. Facing challenges in the world of education during the COVID-19 pandemic can be a lesson for creating better education in the future. Therefore, this research focuses on analyzing the advantages and challenges of using e-learning for the learning process during the COVID-19 pandemic in various studies based on literature studies to prepare for a better future academic period.

METHODS

This research was conducted for 4 days, through the method of studying literature based on journals obtained through ScientistDirect and GoogleScholar.
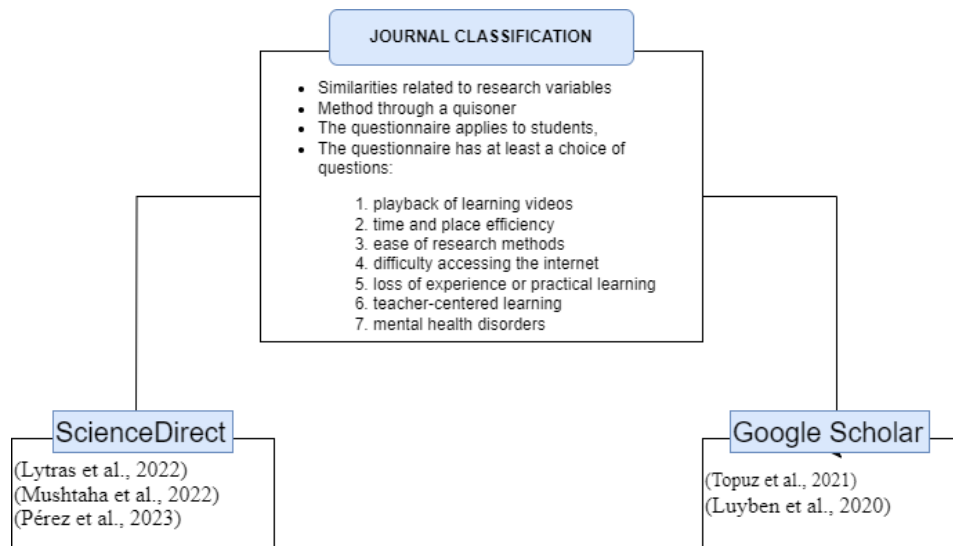
RESULTS AND DISCUSSION

Research conducted by Lytras et al (2022) , used 4044 respondents including 3201 students and 843 professors using e-learning at the Instituto Polite-cnico Nacional, Morocco. This research focuses on exploring differences of opinion on satisfaction between professors and students in the use of e-learning during the COVID-19 pandemic. The results obtained show that more than half of student and professor respondents agree that technology integration in the form of e-learning is an active learning strategy during the COVID-19 pandemic. There are differences in perceptions between students and professors, for students the most important satisfaction is e-learning related to perceptions of one's own skills while for professors the most important satisfaction is e-learning related to organizational policies. The biggest challenge for e-learning users is the difficulty of internet access. While the advantage of e-learning users is the flexibility of time. So the authors hope that the Moroccan government will improve infrastructure and capacity to support the continuity of education.

Research conducted by Mushtaha et al (2022) , used a quantitative approach using 1,713 respondents including 227 professors and 1,486 students (1296 undergraduate and 194 postgraduate) e-learning users at Sharjah University, United Arab Emirates. Respondents were 1,713, representing more than 10% of all the faculties at Sharjah University. This research focuses on the opportunities and challenges of using e-learning in learning during the COVID-19 pandemic. The results obtained show the difference between theoretical colleges and technical colleges. Theoretical college students experience a high increase in productivity and learning motivation while technical college students show a low increase in productivity and learning motivation. Overall the results obtained showed that 77.2% of respondents gave the most significant positive response to distance learning using e-learning, namely the flexibility of time and place. In addition, 80.3% of respondents gave a positive response on accessibility and assessment methods. While the biggest challenge was 79.7% of

respondents, most of whom were technical college students, had difficulty accessing laboratories, resulting in a lack of ability and experience in operating laboratory equipment.

The research conducted by Topuz et al (2021) , is a qualitative research with an exploratory case study design. The research was conducted between December 2020 and January 2021. The research was conducted with 50 midwifery students at Ankara University, Turkey. In this study grouped into four themes namely distance education satisfaction, distance education barriers, distance education facilities, concerns about professional careers. The results of the study show that the advantages of distance learning through e-learning are the ability to replay learning videos, increased learning efficiency, time savings, accessibility and convenience compared to face-to-face learning. Obstacles in distance learning through e-learning most often expressed by respondents are the unavailable practical learning and learning using the teacher -centered lecture method. Unavailable practical learning results in a lack of experience, distrust, and a high probability of error. This raises concerns about negative impact on professional career. the use of the teacher-centered lecture method is increasing concerns that it will have a negative impact on professional careers.

The research conducted by Pérez et al (2023) , used a longitudinal non-experimental design. This research focuses on evaluating and comparing the academic performance of all student study programs at the University of Viña del Mar (UVM), Chile in using e-learning during the COVID-19 pandemic. Based on the research results showing a significant increase in academic performance, face-to-face learning in 2018-2019 with an average score of 4.7 ± 0.08 increased to 5.15 ± 0.07 during the pandemic period (2020 to 2021) by using e-learning. This increase occurred because, according to a characterization survey, as many as 25-35% of distance learning respondents were more flexible in time and place as well as learning videos that could be played repeatedly. While the obstacle is the lack of feedback reactions or student responses.

Research conducted by Luyben et al (2020) , in midwifery education, shows that the biggest challenge in distance learning is the loss of practical experience and decreased mental health. One in five students feel anxious and stressed during distance learning. While the advantage of distance learning is the flexibility of time and place. Advantages and advantages affect the learning performance.

CONCLUSION

Research conducted in Mexico (Lytras et al., 2022) , United Arab Emirates (Mushtaha et al., 2022) , Chile (Pérez et al., 2023) , Turkey (Topuz et al., 2021) , European Union (Luyben et al., 2020) was carried out through a quisoner at least with answer choices including playing back learning videos, time and place efficiency, ease of research methods, difficulty accessing the internet, loss of experience or practical learning, teacher-centred learning, mental health disorders with students as main respondent. Based on the results of the quisoner responses, it was obtained that the quisoner answers that were most chosen by student respondents related to the advantages of e-learning based distance learning were time and place efficiency, replaying learning videos, ease of research methods. While the questionnaire answers most frequently chosen by student respondents related to the challenges of e-learning based distance learning are difficulties with internet access, mental

health disorders, loss of experience or practical learning, learning centered on educators. Based on the results of research conducted by Mushtaha et al (2022) and Topuz et al (2021) shows the difference between theoretical colleges and engineering colleges. Theoretical college students experience a high increase in productivity and learning motivation while technical college students show a low increase in productivity and learning motivation. increased productivity and high learning motivation in theoretical college students is supported by flexibility of time and place and the ability to replay learning videos. Meanwhile, the increase in productivity and low learning motivation in technical college students is due to the difficulty of accessing the laboratory and the lack of practical learning available.

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