

## MEDIA ELECTRONIC AS AN ALTERNATIVE METHOD TO IMPROVE LEARNING PROCESS

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### ABSTRACT

This study aims to describe the benefits of digital learning media as an alternative solution for student learning, as well as illustrate the urgency of using digital learning media and the willingness of teachers to use learning media. This research is a qualitative study with a literature review method. The results of this study show (1) how the learning process uses digital learning media to improve the ability of teachers, meet the needs of students, meet the demands of the new paradigm, improve the quality of learning and meet long-term needs. (2) Focus on learning among students with the use of electronic media such as YouTube, e-learning, animated videos and podcasts. (3) the use of electronic media as a place to collect information and materials. (4) Data results in using digital learning media require teachers to have knowledge and skills. Post-pandemic digital learning media is an alternative solution for student learning that is very effective, efficient, and can increase students' interest in learning. Examples of digital learning media are YouTube, e-learning, animated videos, and podcasts that are used to increase the effectiveness of the learning process. The use of appropriate learning media is very useful to increase motivation in learning, therefore teachers play an important role in preparing digital learning media that can create a pleasant learning atmosphere.

**Keywords:** Media electronic, alternative to improved, learning process,

### 1.0 INTRODUCTION

In an effort to improve the effectiveness of technology tools as classroom teaching aids, various technology tools have been developed based on their uses. In addition to delivering messages effectively, various learning methods are implemented to maintain student interest and motivation throughout the information delivery process. Therefore, every aspect of learning tools and materials must be examined first to ensure their effectiveness. However, every new technology tool that is created and innovated needs to undergo extensive testing to ensure its usability and ability to have a positive impact on students. This is because every new technology tool and teaching material has the potential to affect the information delivery process if the developer does not follow the correct procedures and is not tested for effectiveness. Therefore, the purpose of this literature review is to determine the factors that encourage the use of technological tools as teaching aids as well as determine the basic elements that contribute to the technological revolution in the field of education. An electronic media tool is a PowerPoint presentation, which is a set of computer-generated slides used to help convey information in educational learning activities. PowerPoint presentations eliminate

speech boredom, add color to the subject and presentation style, make learning interesting and entertaining, and convey important ideas effectively. This tool also helps make concepts easier to understand. Teleconference is one of the audio or audio-visual meeting tools directly with two or more participants that is conducted using technological instruments. Based on the level of user participation and technological sophistication, four categories of teleconferencing have emerged, according to Döring et al. (2022), Hoque, and Alam (2010). The exchange of real-time voice messages directly over a telephone network is known as audio conferencing. When high-bit-rate text and skilled images like various obstacles prevent higher education environmental education programs from using e-learning technology effectively.

## **2.0 MODE OF LEARNING PROCESS**

The government of Malaysia has placed a lot of emphasis on online learning. According to Lee, Yoon, and Lee (2009), e-learning is a type of instruction that permits students to communicate, collaborate, use multimedia, transfer knowledge, and participate in web-based training, all in an effort to encourage students to actively study without being limited by time or location. The government has implemented a number of information technology projects in the field of education in addition to Vision 2020, such as the building of a Smart School in 1997 with the goal of fostering in pupils a self-motivated attitude toward lifelong learning (Digital Learning Newsletter, 2008). Academic institutions also implement e-learning in the proper ways. For the purpose of creating an online learning environment, each offers a portal (Khalid, Yusof, Heng, & Yunus, 2006). According to the Ministry of Education's definition of e-learning, e-learning initiatives should incorporate systems that make it easier to gather, store, access, and share data in a variety of formats (Hasan, 2002). From the perspective of the student, the ability to be motivated to participate actively in online learning is essential to its efficacy, particularly when the amount of time spent online is considered the primary factor in determining the method's overall effectiveness (Brown, 2005). Interest, attitude, and the desire for achievement or success are factors that influence a person's motivation to learn (Virban, P.S. & Antonescu, F.M., 2014). determining how prepared students are for e-learning and how they perceive it (Imel, 2002; Goi, C.L., and Ng, P.Y., 2009), as it may be argued that this information represents how successful e-learning is. The pupils' preparedness to access the subjects they are studying is the main focus. Ethnic relations taught online, through a classroom setting, or through electronic means. The students' high degree of dissatisfaction with in-person lectures and their lack of faith in the efficacy of online learning can also be linked to the preparedness level. Students were observed to behave in a backward or reverse way as a result, gathering lecture material through the discussions that took place in the tutorial class, which was perceived to way communication.

## **3.0 FOCUSING IN LEARNING STUDENTS**

Based on the provided guidelines, it is evident that electronic media maintains an important role in enhancing the learning process by exposing students to a variety of subject areas. Use of electronic learning media has been associated with positive outcomes, such as increased critical thinking ability, increased learning outcomes, and increased student engagement. According to Freeman et al. (2014), this undermines the comprehensive meta-analysis that shows that active learning, which is facilitated by electronic media, contributes to

students' improving performance in math, science, and physics. This highlights the importance of electronic media in fostering active learning and knowledge acquisition among students.

Furthermore, research by Marnita et al. (2021) suggests that positive effects of online learning environments on students' learning outcomes are associated with critical thinking skills in the context of physical education. This highlights the potential of electronic media to improve students' ability to learn at a high level and their willingness to solve problems in the learning community. In addition, the development of electronic learning modules based on STEM subjects is aimed at developing students' creativity. As stated by (Melisa et al., 2021), these modules highlight the practicality and quality of electronic learning materials in providing clear and concise learning materials for independent study.

Additionally, Tobing & Oktaviani's (2022) study provides insights into the effectiveness of electronic learning materials for EFL students' comprehension, emphasizing the importance of motivation and *faedah* in relation to electronic learning materials. Reference Chen & Bryer (2012): "Investigating instructional strategies for using social media in formal and informal learning" The international review of research in open and distributed learning (2012) This article investigates instructional strategies for using social media in formal and informal learning, shedding light on the potential applications of social media in enhancing the learning process.

#### 4.0 DATA COLLECTION FROM MEDIA ELECTRONIC

Electronic media is a huge repository of information that has to be effectively and efficiently studied. It is a necessary part of rising to the challenge of ever-expanding knowledge research. If educators and students are not proficient in using information technology, they will lose a great deal of time and have less possibilities to master the material. As a result, education will become less effective. The internet is an example of an information technology application that calls for specialized knowledge and abilities in order to use it effectively. Various techniques and instruments have been used by researchers to gather data from electronic media. There has been an explosion in the analysis of posts and discussions on social media platforms using either aggregate numerical data collecting or qualitative methodologies (Golder et al., 2017).

The Strengths and Difficulties Questionnaire (SDQ), an assessment of excessive electronic media exposure, and interview questionnaires with sociodemographic data have all been used as data gathering instruments (Ibrahim et al., 2022). Furthermore, social media has been employed by researchers as a means of participant recruitment, dissemination, and data collecting (Dol et al., 2019). Sentiment analysis has been shown to depend heavily on data extraction from social media sites (Teixeira & Laureano, 2017). Personalized healthcare and public health surveillance have also Researchers have also employed interviews and surveys in the context of electronic media to gather data (Qadoos et al., 2020). Furthermore, it has been proposed that social media data, including Twitter, be used for public health surveillance and translational medicine (Saputra, 2019).

According to Dijkstra et al. (2018), there is potential for electronic data collection in the fields of telemedicine and cardiorespiratory fitness. The viability of getting lifestyle measures via a smartphone app has been investigated. made use of social media data and electronic health records (Garett & Young, 2022). Many disciplines have investigated the use of electronic

media as a data gathering point in great detail. To promote translational research informatics, electronic data capture techniques like REDCap have been created. This helps to overcome the difficulty of safely gathering and exchanging data with several collaborators. et al. Harris (2009). Social media sites like Facebook have been used for direct online data collecting and creative participant targeting, which reduces entry costs and data transmission times (King et al., 2014).

Additionally, research on the effects of excessive exposure to electronic media on preschoolers' behavioral issues has been conducted using electronic media; this highlights the potential of electronic media as a data collection point in developmental psychology research (Ibrahim et al., 2022). Furthermore, research on how electronic media affects college students' fashion choices shows how important electronic media is as a source of information for comprehending social and cultural phenomena (Qadoos et al., 2020). The aforementioned references demonstrate the multifarious uses of electronic media as an invaluable instrument for gathering data in several study fields.

## **5.0 RESULTS OF USING ELECTRONIC MEDIA AS LEARNING MEDIA**

According to the above sources, there is much promise for enhancing student learning outcomes in a variety of educational contexts when using electronic media as a teaching and learning tool. For example, using smartphone apps like "quizizz" has been shown to increase student motivation, which in turn improves learning outcomes Wibawa et al. (2019). In a similar vein, the definition and comparison of e-learning, m-learning, and d-learning via electronic devices highlights the potential of electronic media in promoting learning (Basak et al., 2018). Additionally, it has been demonstrated that using learning films and electronic learning aids can enhance learning outcomes in topics like algebra and local history, demonstrating the usefulness of electronic media in a variety of educational settings. Wijaya et al., 2022; Hernawati et al., 2021). Furthermore, it has been discovered that the usage of audio-visual-based electronic media and ICT-based learning media enhances learning effectiveness and supports the success of learning activities (S et al., 2022; Mahatmasari & Suhartini, 2022).

The positive influence of electronic media on student achievement has been highlighted by the development of electronic modules, animation-based learning media, and educational game media, all of which have been linked to improvements in student learning outcomes (Rahayu & Sukardi, 2021; Wahyuddin et al., 2022; Syam et al., 2019). The advantages of electronic media in educational settings are further highlighted by the usage of educational gaming media and electronic wall magazines, which have been connected to higher student accomplishment and learning interest (Yuniati et al., 2022; Syam et al., 2019). Electronic media has the potential to enhance the learning process; this is demonstrated by the development of e-modules and educational gaming media, which have been found to effectively improve students' learning outcomes (Ahmad et al., 2017; Syam et al., 2019).

All things considered, the research from these references shows how beneficial electronic media is as a teaching tool and provides proof of its ability to raise student motivation, enhance learning outcomes, and produce dynamic and interesting learning environments.

## **6.0 LIMITATION THE PROCESS IN MEDIA ELECTRONIC**

The limitations of electronic media processes can be investigated in a variety of settings, according to the references supplied. For instance, the intricacy of using new technology and the effect of media restrictions on insider acquisitions might provide problems for electronic media processes. DeSanctis & Poole, 1994; Nguyen, 2021). Furthermore, parental control over their children's internet usage and the methods they use to supervise their young children's media consumption draw attention to certain drawbacks and issues with electronic media processes (Livingstone & Helsper, 2008; Nikken & Schols, 2015). Moreover, the influence of media consumption on journalists' professional English communicative competence through mass media development and political participation can illuminate the possible drawbacks and difficulties related to electronic media processes (Bakker & Vreese, 2011; Chernii et al., 2020).

Furthermore, the parental mediation theory for the digital age and the regulating techniques used by parents of young people can shed light on the constraints and intricacies of electronic media processes (Poulain et al., 2023; Clark, 2011). Furthermore, a meta-analysis of how electronic devices affect students' academic performance and interpersonal connections as well as parental mediation can provide insightful information about the limitations of electronic media processes (Chen & Shi, 2018; Alkandari & Al-Alawneh, 2019).

Additionally, interactions with the media during nuclear or radiological events, as well as broad and useful suggestions for improvement, can shed light on the difficulties and constraints associated with using electronic media for crisis communication (Perko et al., 2016). All together, these references provide a wide range of viewpoints on the constraints and difficulties related to electronic media processes across many fields.

## 7.0 CONCLUSION

According to the referenced sources, using electronic media as a substitute for traditional teaching methods has many benefits. According to Sterling et al. (2017), the use of social media in graduate medical education has been linked to improved learning outcomes and professional growth by encouraging more communication and collaboration among medical professionals. Furthermore, the effectiveness of learning materials has increased significantly with the integration of instructional software and electronic learning aids, giving students interactive and interesting learning experiences (Kirkorian et al., 2008; Kozma, 1991).

Additionally, there is evidence that using social media applications in college instruction is associated with favorable educational results and perceived utility, demonstrating social media's ability to improve the learning process (Cao et al., 2013). Furthermore, there are now more options for interactive and technologically enhanced learning experiences because the use of touchscreen devices and digital technology has been linked to cognitive development in infants and toddlers (Li et al., 2018; Villanti et al., 2017). Furthermore, it has been established that creating e-modules and incorporating STEM-based learning resources are useful approaches for encouraging students' critical thinking, creativity, and cognitive growth (Ciriminna et al., 2023; Hayes et al., 2020; Melisa et al., 2021; Rahayu & Sukardi, 2020).

Futhermore,the advantages of using electronic media for medical education and scientific communication have been demonstrated by the use of social media in radiology education and the facilitation of scientific public engagement through social media platforms (Ranginwala & Towbin, 2018; FitzGerald et al., 2014). The incorporation of e-media into the electronics

technology curriculum has given educators access to new teaching resources that can improve student learning and competency development (Toledo, 2021). Furthermore, media education has been found to be an effective strategy to reduce youth receptivity to the negative impacts of media exposure, highlighting the role that media literacy may play in fostering critical thinking abilities and positive media interaction (Strasburger, 2010).

Together, these references demonstrate the many benefits of using electronic media as a substitute for traditional teaching methods to boost learning. These benefits include improved communication, teamwork, interactive learning opportunities, cognitive growth, creativity, and critical thinking abilities. The use of electronic media in the classroom opens up new possibilities for productive and interesting learning experiences, improving both student results and instructional strategies.

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