

IMPACT OF USING TECHNOLOGY IN EDUCATION

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Abstracts

The aim of this research is to identify the impact of using technology in education. This paper proposes a framework to identify four main aspects of the impact of using technology in education. As a result, the study reveals the impact of using technology in education consists of effectiveness, increased performance, misconduct and integration. This paper also shows the table analysis of review and the figure proposed research framework.

Keywords: Technology, education, effectiveness, performance, misconduct, integration.

1. Introduction

The term of technology is more significant in the era of 21st century. People have more interest to do anything in their live using the technology. It is actually become the most important part in the society. Using the technology, work can be done with more easily and people can finish the work quickly, thus can save their time. Not only that, people also used technology for the communication, transportation, learning, manufacturing, securing data, scaling business and any other things. But then, we must remember, if the technology used in a good way it will turn to be good, when people misuse it, then, it will make bad thing happened. So, people must always careful in using the technology to avoid any wrong information spread and caused troubled.

Education is another part of human life. It is important part that will determine either someone will having a good or bad life. Through education, people can change their future to be better. Education is actually is the process of gaining the knowledge and skills through study and guidance or instructions. Teacher usually will be the guidance and give the instruction to the students. It can be divided into two which is formal and informal. Formal education can be seen through school, universities or college which have a standard and structured curriculum. For informal education, it is learning or skills acquired without any structured curriculum.

When the technology become part of the education, it can make a big impact to the education system. The examples of the technology that can be used in the education is smart boards, classrooms pc, projectors and television. All of this technology can help students learn with more interactive and fun. They would find that learning is actually not bored but interesting. Other than that, students can also easy to understand what is actually they learned. In this 21st century, information is scattered through the internet. So, students especially, can get a lot of information through the internet by using all of the technology exist. Besides, learning also can be done using the online worldwide such as online forum, Google doc, Whatsapp and others.

The aim of this study is to measure the impact of using technology in education. In order to achieve this objective, this research proposed a framework to identify four

main aspects of the impact of technology used in education. The other remainder of this paper is organized as follows. Section 2 is about the literature review. Proposed framework is in Section 3. Final section of the study contains some concluding remarks.

2. Literature Review

This research is anticipated to analyze the impact of using technology in education. For the impact of using the technology towards education, we focus on four main aspect; effectiveness, increased performance, misconduct and integration.

2.1 Effectiveness

The deployment of technology in education bring an effective effects in students' learning and lecturers' teaching. Various medium can be used by students and teachers to support deep understanding teaching and learning. According to UNESCO, (2005); Adedokun-Shittu & Shittu, (2015), ICT should combined with traditional technologies and applied to the training of teachers to make it more effective especially in developing countries. Meanwhile, Al-Qallaf & Al-Mutairi, (2016) concluded that, blogs can be more effective when students received specific instructions and teacher feedback. Also, schools had proper information technology support and teachers were provided suitable training. Other than that, research from Lal & Paul, (2018) stated that effective use of new educational technology (NET) can make a huge potential in the education as it can enhanced outreach and improved the quality of education. The several factors which strengthen the use of NET is age of students, nature of institution, job preference and impediments. Pate, (2016) reported that technology-enabled active learning (TEAL) can helps to incorporate technology in an effective ways such as through activities, collaboration and creation through the use of technology and it is had been proven. Based on the online survey and student interviews, Dickfos et al., (2014) get to know that blended learning technologies make flexibility in assessment, student self-reflection and fairness in assessment practices which means it will be more effective for students and teachers. Then, based on research by Teo, (2013), when teachers have an intention to use the technology, it will contribute to effective use of the technology especially in teaching and learning.

2.2 Increased performance

Based on the finding by Al-Qallaf & Al-Mutairi, (2016), student performance in term of their writing skills become more better which they able to write lengthy sentences, the spelling and grammatical mistakes reduced, feel motivated and independent and also displayed a positive attitude in learning. Meanwhile, Al-Mudimigh et al., (2001); Hong and Kim, (2002); King et al., (2002); Abugabah et al., (2015) stated that, organizations adopt enterprise resource planning (ERP) and their applications to improve performance by improving the availability, clarify, integration, and accuracy of data and information, enhancing efficiency, and reducing performance errors. Besides that, finding of the research by Abugabah et al., (2015) has indicate that enterprise resource planning (ERP) systems had improved user performance in term of time taken to perform the tasks and accomplish job. In the research paper by Chulkov &

VanAlstine, (2014), the study focus more about student preferences towards electronic textbooks and student performance. Students actually can choose textbook formats by themselves because they know what their learning style is. This can help them to increase their performance in learning.

2.3 Misconduct

Based on analysis, the technology will increase academic misconduct. According to Tinkelman, (2012); Walters & Hunsicker-Walburn, (2015), there are possible methods that can be used to obstruct intentional academic misconduct. A few suggestions to address technology misuse have been stated such as forbidding or limiting technology, securing laptops, using turnitin.com or similar services, biometrics, and video monitoring. Other than that, researchers have suggested that 97 percent of students using mobile devices have triggered instances of academic misconduct (Tindell and Bohlender, 2012; Rosile, 2007; Khan and Balasubramanian, 2012; Walters & Hunsicker-Walburn, 2015).

2.4 Integration

One of the ICT impacts will be integration besides perception, motivation and challenges. There are few areas where integration takes place in UNILORIN which is ICT integration in teaching and learning, ICT integration in curriculum, ICT-based assessment and a blend of ICT-based teaching and learning methods with the traditional method (Adedokun-Shittu & Shittu, 2015). Author also highlighted that ICT integration does not replace the traditional method in the classrooms but only improves teaching and learning practices. Meanwhile, Ramma et al., (2015) stated that, the integration of technology in education must be realised within a dynamic paradigm to allow updates to be effected progressively for make learning become meaningful. Other than that, the study takes lessons from previous IS models which suggested that an integration from the current models to a combined model can lead to a more descriptive investigation (Urbach et al., 2009; Dishaw and Strong, 1998; Abugabab et al., 2015).

Table 1. Analysis of Review

Author (s)	Effectiveness	Increased performance	Misconduct	Integration
Adedokun-Shittu & Shittu, (2015)	✓			✓
Ramma et al., (2015)				✓
Al-Qallaf & Al-Mutairi, (2016)	✓	✓		
Lal & Paul, (2018)	✓			
Abugabab et al., (2015)		✓		✓

Pate, (2016)	✓			
Dickfos et al., (2014)	✓			
Walters & Hunsicker-Walburn, (2015)			✓	
Teo, (2013)	✓			
Chulkov & VanAlstine, (2014)		✓		

3. Proposed Framework

Fig. 1 shows proposed framework to guide this research about the impact of using technology in education which are effectiveness, increased performance, misconduct and integration. In this study, it is identified that there are four different independence variables. Independence variables are defined based on previous discussion in Section 2.1 Effectiveness, Section 2.2 Increased performance, Section 2.3 Misconduct and Section 2.4 Integration. These independence variables are important due to the implementation of the technology in education.

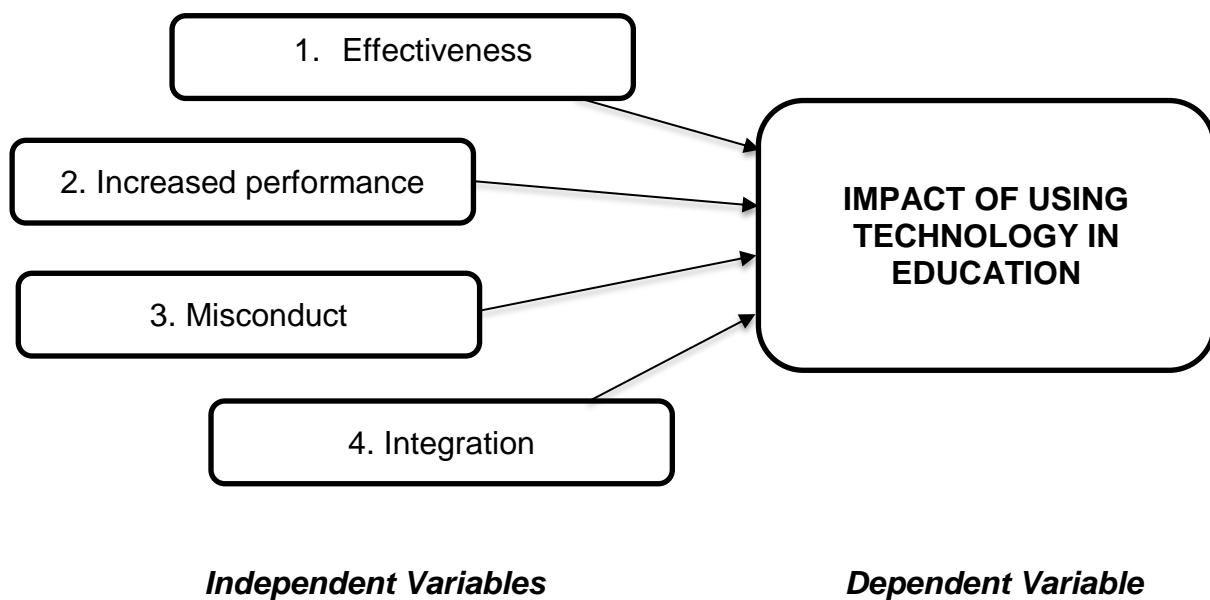


Fig. 1. Proposed research framework

4. Conclusions

As a conclusion, implementation of the technology in the education can bring a lot of impacts to the teachers and students. It is because, the technology nowadays had been scattered around the world and it cannot being stopped. People depend on the technology to do everything in their life. Furthermore, technology can bring a lots of

advantages to the society especially in the education. It can help in teaching and learning process to be more effective and attractive. But, we must remember one thing which is the technology sometime can bring disadvantages for students. When the technology being misuse, the academic misconduct can happened among the students.

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