

THE BENEFITS OF TECHNOLOGY TOWARDS STUDENTS' PERFORMANCE

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Abstract

The purposed of this research is to evaluate the benefits of technology towards students' performance. This paper proposes a framework to identify four benefits concerning about the benefits of technology. The studies result that the benefits of technology in educational learning consists the satisfaction, effectiveness, performances and as well as students' engagement. This paper also shows the table analysis of review and the figure proposed the research framework.

Keywords: satisfaction, effectiveness, performances, students' engagement, digital technology, educational technology.

1. Introduction

The existence of today's technology is beneficial to everyone in all things including business, education and so on. Nowadays, education is a great way of using technology to facilitate the teaching and learning process, especially in providing information to students, facilitating time management of students to complete a task given. The foremost critical component that strengthens the usage of modernization within the instructive framework is web (Al-Hariri & Al-Hattami, 2016). Simply to say, with the survival of digital technology it is enable students to connect with their teachers and classmates anywhere and anytime (Balasubramanian, V & Fukey, 2014). Because of this, it offers students expanded choices and openings within the setting of online instruction. Going with this advancement has been progressing investigate into the relative adequacy and proficiency of instructive technology to upgrade learning and accomplishment (Rabah, 2015).

The aim of this study is to evaluate the benefits of technology towards students' performance. In order to achieve this objective, this research proposed a framework to identify the main aspects of the benefits of using digital technology in classroom. The remainder of this paper is organized as follows. Section 2 is literature review. Proposed framework is in Section 3. Final section contains some concluding remarks.

2. Literature Review

This research is to evaluate the benefits of technology towards students' performance. As for the benefits that have been highlighted are the satisfaction of student towards the using of technology during learning process in the classroom, effectiveness the technology for educational technology, performances as well as students' engagement.

2.1 Satisfaction

Research thinks about that have been conducted into how understudies passage in online courses versus face-to-face courses, in expansion, investigate has compared students' satisfaction with different course situations. A few subjects got to be apparent after students' study reactions with respect to their generally fulfillment with the online course were considered. The evident from these comes about that the understudies within the exploratory cohort felt the interaction and collaborative involvement to be a positive one that made a difference increase their information and understanding of the course material (Balasubranian, V & Fukey, 2014). Ifinedo (2017) indicated the result from one of the address from the overview is reliable with past thinks about that appeared that affirmation and satisfaction are emphatically related within the setting of learning innovations. In the other experiment, Yang et al. (2014) showed the result examination of the chat log uncovered the positive result which is the fulfillment level of the group individuals within the cross-cultural online collaboration between two nations. Understudies were active and locked in within the first two weeks, and they were fulfilled with the method of knowing each other and approximately their culture, which would cultivate social mindfulness and feeling to relate as a bunch (Yang et al., 2014). According to the other survey, most how respondent outline their fulfillment with computerized innovation that's issues of usefulness, responsiveness and an ease of being able to discover one's way around the requests of college environment (Henderson, Selwyn & Aston, 2015). On the other hand, both student and teachers shown their satisfaction with utilizing innovation in educating and learning handle which innovation can offer assistance understudy to progress their certainty and can contribute to superior social and brain research abilities (Smeda, Dakich & Sharda, 2014).

2.2 Effectiveness

According to the prior researcher, that there's no argument that ICT features a positive impact on the scholarly accomplishment of uncommon needs students. It is seen as a apparatus that effectively underpins the scholastic victory of the understudy with learning troubles and makes a difference the understudy accomplish certain competencies, in addition to being more engaged in the classroom (Rabah, 2015). Meanwhile, Palaigeorgiou & Grammatikopoulou (2016) found about the motivational impacts on students, the openings for making items and communicating their efforts, the modern time-space of intelligent and the relationship with their instructors are reliable with what other teachers have detailed with respect to instructive possibilities of Web 2.0 devices. All these characteristics can work as determinative triggers of compelling learning. On the other hand, online considering complies with the adaptable learning needs of Millennial understudies, it opens up "in class/contact time" for successful help of learning and it helps to diminish the value-based separate between understudies and teachers in huge student groups (Oordt & Mulder, 2018). In specific, students report the instructive benefits of computerized innovation are more precisely portrayed as concerned with the coordinations of college consider instead of things related straightforwardly to learning prepare. Numerous of them reactions related to utilize of

advanced innovation to find and recover diary articles and books, to yield assignments, to work out course necessities and planning issues, to expend address substance and so on. That can be compelling towards students' scholarly exhibitions (Henderson, Selwyn & Aston, 2015). Barhoumi (2015) released the past think about who investigate the viability of the blended learning handle utilizing advanced technology. The result of the past ponder affirms the result of the think about by Williams, Birch and Hancock illustrating that online addresses are more successful when combined with going to face-to-face addresses.

2.3 Performances

Based on the capabilities of digital technology, it increases student's motivation to learn as well as enhancing the students' academic performance. But however, it was not recommended because the utilizing of digital technology could be portrayed as being both effective and ineffective towards students' performances (AlJeraisy et al., 2015). The nature of the internet 2.0 exercises too challenges the introduced hones for surveying students' execution, once the understudies wrapped up their extend, the analysts talked about how they may assess in case understudy had learned history. It was not conceivable with the ordinary way (Palaigeorgiou & Grammatikopoulou, 2016).

Meanwhile, Carver (2016) indicated that computerized innovation can increment student inspiration, state of mind, engagement as well as self-confidence. All of the components taken together were found essentially make strides school participation and scholarly execution. Same goes as Ogirima, Ohawuiro & Oyeniran (2017) assistive innovation gives understudies with extraordinary needs more prominent control over the learning encounter, makes strides their communication aptitudes and makes a difference them to perform assignment freely which improving their scholastic exhibitions. Al-Hariri & Al-Hattami (2016) demonstrated that the application of innovation in instruction must be possibly profitable implies of making a great learning environment that can offer assistance teaches ended up more proficient in moving forward students' capacity and understanding through basic examination. Through this, he found understudies are more likely to remain locked in and innovation makes a difference make educating and learning physiology more significant than without such openings.

2.4 Students' Engagement

According to the prior research, they found that technology can be used and this will make students' engagement will be higher as well as the school will surely feel an enhancement in student achievement results because individualized learning and interest levels of the students will be much higher (Rabah, 2015). Individuals who are get involve positively in a working group believe that their needs can be satisfied through working cooperatively and collaboratively with other people (Barhoumi, 2015). Barhoumi (2015) also confirmed the importance of an online social existence in helping learners become more engaged. According to another researcher, also indicated the same thing that digital technology use encourages students' engagement with teaching materials and socialize with classmate (Ifinedo, 2017). Digital technology is more effective than confront learning and it acknowledge that the factors impacting student

performance is a combination of the usage of technology as well as educational changes to rise student participation by meeting student needs for stretchy learning (Oordt & Mulder, 2018). According to Carver (2016) research, the crucial reason teachers chose to use technology was because they felt it resulted in increased student engagement.

3. Analysis of Review

Table 1 shows the analysis of previous studies on the benefits of usage technology towards students' performance. The study found that among the most issues that were discussed in terms of student learning are effectiveness and student's performance with the utilize of technology in the classroom. This because the usage of digital technology has relationship between teachers and students in education that can help in teaching and learning process as well as enhancing students' performances specially to complete their homework. However, other issues that were discussed even though there was not much in the study were the satisfaction and student engagement on the use of digital technology.

Table 1: Proposed research framework

Author	Satisfaction	Effectiveness	Performance	Student Engagement
Ifinedo, 2017	✓			✓
Ogirima, Ohawuiro & Oyeniran, 2017			✓	
Carves, 2016			✓	✓
Palaiageorgiou & Grammatikopoulou, 2016.		✓	✓	
Rabah, 2015		✓	✓	✓
Bouhnik & Deshen, 2014		✓		
Henderson, Selwyn & Aston, 2015	✓	✓	✓	✓
Yang et al., 2014	✓	✓	✓	
Oordt & Mulder, 2018		✓		✓
Muhammad Arif et al., 2016				
Barhoumi, 2015		✓	✓	✓
AlJeraisy et al., 2015	✓	✓	✓	✓
Cheema & Zhang, 2013		✓	✓	
Mathupayas, 2013		✓		✓
Balasubranian, V &			✓	✓

Fukey, 2014				
Al-Hariri & Al-Hattami, 2016		✓	✓	
Smeda, Dakich & Sharda, 2014	✓	✓		✓
Jaradat, 2014		✓	✓	
Ventakesh, Croteau & Rabah, 2014	✓	✓		
Kazu & Demirkol, 2014		✓	✓	

4. Research Framework

Figure 1 show the purposed framework to guide the research on benefits the usage of technology towards student performances. Research studies indicate that satisfaction, effectiveness, performances and students' engagement has influence on the benefits of the usage of technology in education. That is, when students have a positive impact in learning using digital technology, so their academic achievement will not be easy to decline.

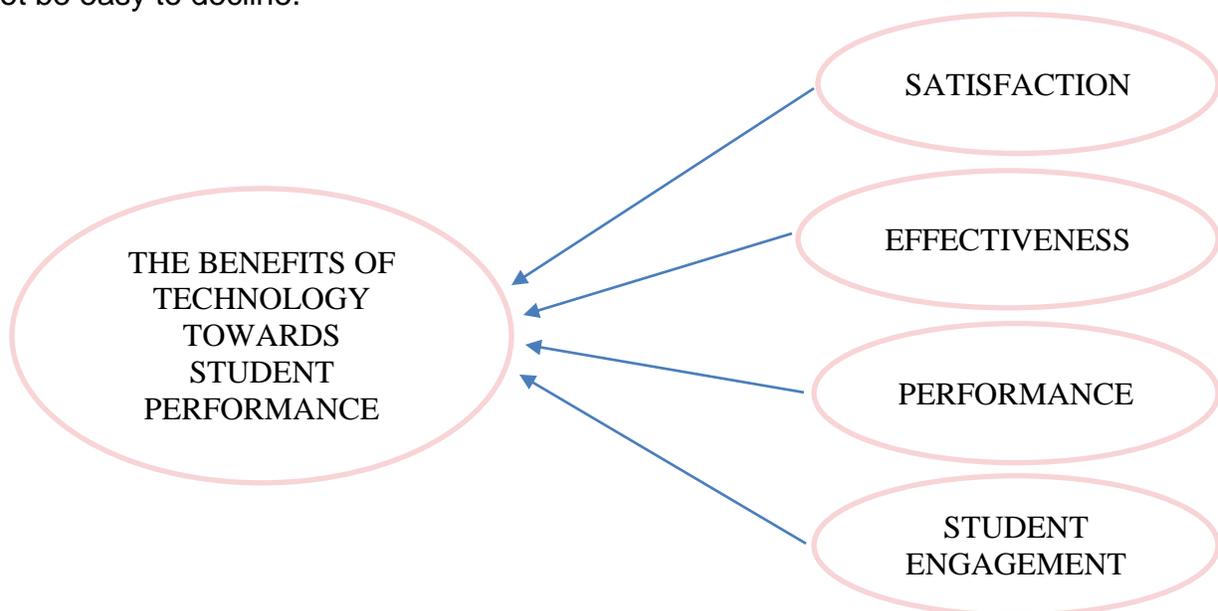


Figure 1: Proposed Research Framework

5. Conclusion

In conclusion, computerized innovation in instruction can improving educating and learning prepare in numerous ways. The esteem of instructive innovation settings depends on the objectives it serves and how it is utilized by the instructors and understudies within the classroom. As in ponder inquire about, it makes a difference the human capacity to shape and alter the physical world to meet needs, by controlling materials and devices with strategies. Today technology has

actually created a generation capable of interacting with and learning process in the classroom. Moreover, technology has the ability to enhance relationships between teachers and students. More than ever, educational technology plays crucial role in teaching because with the help of various applications for distance education, teachers and student themselves, they can see the importance of technology in education.

References

- Al-Hariri, M., & Al-Hattami, A. (2016). Impact of students' use of technology on their learning achievements in physiology courses at the University of Dammam. *Journal of Taibah University Medical Sciences*, 12(1), 82-85. doi: <http://dx.doi.org/10.1016/j.jtummed.2016.07.004>
- AlJeraisy, M., Mohammad, H., Fayyumi, A., & Alrashideh, W. (2015). Web 2.0 in Education: The impact of discussion board on student performance and satisfaction. *The Turkish Online Journal of Educational Technology*, 14(2).
- Arif, M., Ameen, K., & Rafiq, M. (2018). Factors affecting student use of Web-based services. *The Electronic Library*, 36(3), 518-534. doi: 10.1108/el-06-2016-0129
- Balasubramanian, K., Jaykumar, V., & Fukey, L. (2014). A Study on "Student Preference towards the Use of Edmodo as a Learning Platform to Create Responsible Learning Environment". *Procedia - Social and Behavioral Sciences*, 144, 416-422. doi: <http://dx.doi.org/10.1016/j.sbspro.2014.07.311>
- Barhoumi, C. (2015). The Effectiveness of Whatsapp Mobile Learning Activities Guided by Activity Theory on Students' Knowledge Management. *Contemporary Educational Technology*, 6(3), 221-238.
- Bouhnik, D., & Deshen, M. (2014). WhatsApp goes to school: Mobile instant messaging between teachers and students. *Journal of Information Technology Education: Research*, 13, 217-231.
- Carver, L. (2016). Teacher Perception of Barriers and Benefits in K-12 Technology Usage. *The Turkish Online Journal of Educational Technology*, 15(1).
- Cheema, J., & Zhang, B. (2013). Quantity and quality of computer use and academic achievement: Evidence from a large-scale international test program. *Journal of Education and Development Using Information and Communication Technology*, 9(2), 95-106.
- Henderson, M., Selwyn, N., & Aston, R. (2015). What works and why? Student perceptions of 'useful' digital technology in university teaching and

- learning. *Studies in Higher Education*, 42(8), 1567-1579. doi: 10.1080/03075079.2015.1007946
- Ifinedo, P. (2017). Students' perceived impact of learning and satisfaction with blogs. *International Journal Of Information And Learning Technology*, 34(4), 322-337. doi: 10.1108/ijilt-12-2016-0059
- Jaradat, R. (2014). Students' Attitudes and Perceptions towards using m-learning for French Language Learning: A case study on Princess Nora University.
- Kazu, I., & Demirkhol, M. (2014). Effect of Blended Learning environment model on high school students' academic achievement. *The Turkish Online Journal of Educational Technology*, 13(1).
- Ogirima, O., Emilia, O., & Juliana, O. (2017). Teachers' attitude and competence in the use of assistive technologies in special needs schools. *Acta Didactica Napocensia*, 10(4).
- Palaigeorgiou, G., & Grammatikopoulou, A. (2016). Benefits, barriers and prerequisites for Web 2.0 learning activities in the classroom. *Interactive Technology and Smart Education*, 13(1), 2-18. doi: 10.1108/itse-09-2015-0028
- Rabah, J. (2015). Benefits and Challenges of Information and Communication Technologies (ICT) Integration in Quebec English Schools. *The Turkish Online Journal of Educational Technology*, 14(2).
- Smeda, N., Dakich, E., & Sharda, N. (2014). The effectiveness of digital storytelling in the classrooms: a comprehensive study. *Smart Learning Environments*, 1(1). doi: 10.1186/s40561-014-0006-3
- Thongmak, M. (2013). Social Network System in Classroom: Antecedents of Edmodo © Adoption. *Journal of E-Learning And Higher Education*, 1-15. doi: 10.5171/2013.657749
- Van Oordt, T., & Mulder, I. (2016). Implementing basic e-learning tools into an undergraduate taxation curriculum. *Meditari Accountancy Research*, 24(3), 341-367. doi: 10.1108/medar-08-2015-0054
- Venkatesh, V., Croteau, A., & Rabah, J. (2014). Perceptions of Effectiveness of Instructional Uses of Technology in Higher Education in an Era of Web 2.0. *2014 47Th Hawaii International Conference On System Sciences*. doi: 10.1109/hicss.2014.22

Yang, J., Huiju, Y., Cen, S.-J., & Huang, R. (2014). Strategies for Smooth and Effective Cross-Cultural Online Collaborative Learning. *Educational Technology & Society*, 17 (3), 208–221.