



Effectiveness of Digital technologies in the classroom

Rakhmatullayeva Dilobar Erkinovna

Master of Arts in Teaching English as a Second Language

Specialized School in the System of the Agency of Specialized Educational Institutions

+998999382780

ahrolovadilobar@gmail.com

Abstract

This study was aimed to examine the efficacy of utilizing digital technologies in ESL classroom. The research was composed 24 undergraduate students of teaching sphere. Students completed questionnaires regarding the usage of technologies (laptop, videoconferencing, e-reader, phone) and digital websites (storybird, ppt makers, flipgrid, brainstorming map makers). During the semester students learn the effectiveness of educational technologies and tools. The result showed all students use the tools and technologies effectively, however, e-reader was utilized less during the lessons. Besides, students claim that digital technology bring to the lesson more interesting atmosphere and help to spend their time more effectively. Furthermore, it gives permission to use new method of teaching and learning as well as enhance their learning speed. Moreover, feedbacks were given by instructor while and after using technologies.

Key words

multimedia courses, digital technology, collaboration tools, Flipgrid, storybird, brainstorming, videoconferencing,

Introduction

There was time before that multimedia courses were not so popular in education because they demanded huge expenditures and up-to-date technological expertise. Yet, nowadays, with the help of advanced gadgets like laptop, organizing, designing, conducting the lesson with digital devices make easier. No longer teachers find the lessons difficult and boring with the help of out of date methods of teaching such as paper based, teacher oriented ones.



According to prior research on the use of digital devices in the lesson shows that remarkably more used their phones, tablet or iPad and e-readers for academic purposes in the year of 2014 than before. Dahlstrom and Bichsel claim that among students who have the ownership to use these devices for academic work, changed much their attitudes toward them during the same time period.

Study is aimed to investigate the efficacy and importance of technology together with student expectations and experiences (Dahlstrom, Brooks, Grajek, Reeves, 2015). The results highlights that technology affect students' lives and have positive attitudes by using them. They said that in the survey time to time, difficulties in using technology for academic purposes is getting much easier due to the fact that there were various factors such as ease of finding learning and teaching materials, online collaboration tools and sites on the internet.

There were a great deal of studies were done for examining the effect of utilizing educational technologies in higher education. The devices which are smartphones, videoconferencing, Google Docs, and laptops (Buzzard, Crittenden, & McCarty, 2011; Aharony, 2015; Audi & Gouia-Zarrad, 2013.)

In this study, four digital technology were chosen to enhance learning for undergraduate students besides, four digital tools were taken to improve and understand study materials.

- e) Laptop: helps students to meet deadline while doing assignments, provides curriculum support, and source of getting additional information.
- f) Smartphones: assists in teaching for improving workflows and enhances learning experience and engagement in new ways.
- g) Videoconferencing: helps both students and instructors to record lectures, participating the lesson from far away distances.
- h) E-reader: ability to use of millions of books in just one digital device and have a chance to use anytime and everywhere.

Digital tools (sites)



- e) Flipgrid : the website or app permits educators to organize video discussions by creating a group, choosing on theme and inviting students to join the discussion with the help of QR code or a link.
- f) Storybird: this is the digital tool for creating visual stories. It helps to design picture books on their own.
- g) Power Point Presentation: helps to conduct the lesson in a new format by highlighting the most essential features of the lesson in the screen. It makes way to better understand the topic.
- h) Brainstorming: helps to generate essential ideas around a topic. It can be used as a basis for writing, reading as well as discussion. It is claimed that this tool is more productive as a whole- class activity.

Methodology

Following research investigates the connection between the usage of technology in the classroom and student learning, that is to say that how lessons can be more efficient in the classroom. According to Dahlstrom, Bichsel, 2014 said that digital tools can be helpful when students are going to improve their experience, studies. This can be basic factor for increasing motivation, interaction and learning. On the other hand, digital tools are very expensive for students to own them in many educational places.

The subject which involves practical teaching includes a total number of 14 students from Foreign languages and Literature faculty in Uzbekistan State University of World languages. There were 5 males and 9 females in the same group. However, language level is different, there were 3 pre-intermediate, 5 intermediate, 6 upper intermediate students. Students learned several methods, techniques in practicum. The instructor chose four digital gadgets and four websites to teach students the planned topics. The jobs of students to learn how to use them in the classroom and compare traditional paper based lessons.

The aim of this section is to examine how often students had used digital tools and websites on a 5- point Likert scale where 1= never and 5= very often.

The next section addressing efficacy level of using technology and websites and students opinions on a 5- point scale where 1= very ineffective and 5= very effective.



In the last stage students show their level of agreement and disagreement. 1=strongly disagree, 5=strongly agree for 4 digital technology and 4 ESL websites. Some of the examples are given “tools are beneficial for my learning speed in the class”, I would like to learn other tools as well”, “digital technology creates interesting, creative, collaborative atmosphere in the class”. Some of the items included in this research were adapted by Diemer, Fernandez, Streepey, (2012), Lowerison, Sclater, Schmid, Abrami (2006).

Results

In this study results were taken by students on a 5 point Likert scale in the table format. 3 tables were designed according to the sections like Use of technology and websites, the efficacy of using digital technology and websites as well as level of agreement and disagreement.

Use of digital technology and websites

Students were asked about how often they had used digital technology in the class during the practicum course in one semester. The results in table 1 highlighted that smartphone was used “very often”, and “often” but 50% e-reader users said they never unitized this item during semester. Regarding websites, power point presentation was used “very often”. Other websites also did not show low results in using them.

Table 1 using digital technology and websites by 14 students in class (number)

How often do you use the following?	Never	Seldom	Sometimes	Often	Very often
Laptop	-	4	4	3	3
Smartphone	-	-	3	5	6
E-reader	7	2	4	1	-
videoconferencing	1	-	5	5	3
Storybird.com	2	1	1	5	5
flipgrid	-	2	5	3	4



The	Power Point Presentation	-	-	1	5	8
	Brainstorming	1	2	3	3	5

efficacy of using digital technology and websites

Table shows that smartphone and laptop have found very effective ones among others. However, only one student said that videoconferencing is very ineffective. Among chosen websites, storybird.com and brainstorming are showed the same results. No one said power point presentation is very ineffective.

Table 2 The efficacy of using digital technology and websites during semester.(number)

Level	Effectiveness of Digital Technology	Very ineffective	Ineffective	Neutrall	Effectivee	Very effective	of
	Laptop	-	-	5	4	5	
	Smartphone	-	-	3	4	7	
	E-reader	7	2	4	1	-	
	videoconferencing	1	1	4	5	3	
	Storybird.com	3	2	4	3	2	
	flipgrid	-	3	5	3	3	
	Power Point Presentation	-	-	1	4	9	
	Brainstorming	2	3	4	3	2	

agreement and disagreement

It can be seen from the table that 7 students strongly preferred to use smartphone. However, 3 people became neutral. When it comes to websites, high ranked website are PPT and storybird respectively which are preferred by students in the class.

Level of agreement and disagreement	Strongly disagree	Disagree	Neutral	Agree	Stronngly agree



Laptop	-	3	3	4	4
Smartphone	-	-	2	5	7
E-reader	6	2	4	1	1
videoconferencing	1	1	5	4	3
Storybird.com	2	1	1	4	6
flipgrid	1	2	4	3	4
Power Point Presentation	-	-	1	6	7
Brainstorming	1	2	2	4	5

Discussion

The purpose of this study was to investigate the efficacy and use of technology in the classroom. There were a number of findings that were taken from the study.

4. Students showed their highly preference for using smartphone and laptop in all three categories.

5. Students found ineffective e-reader when they had laptop and smartphone. Usage of e-reader was seen in the table the lowest mark.

6. According to the tables, power point presentation maker users were a lot in all tables.

It was not surprising fact that students used their smartphone for several purposes. For example, they had opportunities to communicate with people around the world as a part of their project.

Students observed lessons during the semester and they compared traditional based lessons with digital technology based lessons. They said that digital technology allowed for better use of time while completing tasks. Jacobs (2013) claimed that at the time when students had chance to get access to these kind of digital technologies, they get benefits of their learning when they can adapt to their method, style and pace.

It is interesting to note that website (flipgrid) builds and strengthens social learning communities as they discuss their opinions and ideas, experiences with their partners. It can support student development Johnson, M., Skarphol, M., (2018).



Finally, a few number of people in the current study disagreed or strongly disagreed that digital technology was distraction and ineffective in the class.

In the future. Many researchers should do further investigations on using digital technologies not just practical lessons, ESL lessons. It should have been done on the academic fields as well.

Conclusion

The results of this study provide several findings in the use of digital technology with university students of World Language. Survey was given to check whether students find them effective or ineffective and should use these technologies and websites for their further lessons

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