Teaching In 21st Century: Students-Teachers' Perceptions Of Technology Use In The Classroom

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Abstract: The rapid growth of technology encourages teachers especially who teach English as a foreign language to use it while presenting material and giving instruction in the classroom. Technology, as the newest instructional media developed in this globalization era, presents situation which helps the students to have new authentic and meaningful learning experiences engaging their effort and behavior by providing more fun and effective learning atmosphere. In addition, it provides the opportunity for the students to work collaboratively and easily access the information that can supplement their learning experience. Those benefits become the central part of 21st century education which should be optimized in order to create sophisticated learning immersion and maximize the quality of students in the future. In this research, some media techologies are introduced to one hundred student-teachers having Technology Enhanced Language Learning class. Those media, Prezi as online software presentation, Glogster as visual online poster, Edmodo as online networking application, Toondooas online cartoon strip making and Goanimate as animated video creation, are known as web-based instructional media which can be used by them to teach English as a foreign language. However, questionnaire and interview are used to obtain the data. It aims to investigate their perception while preparing their teaching by using those applications.

Keywords: Technology, 21st Century, Student-Teachers' Perception

INTRODUCTION

The world in 21st century has changed in every aspects of life. The development of technology encourages people to change their habit until it can be said that human cannot life without help of technology. Technology can help people in communication, transportation, and also education. The use of technology in education is developed very fast presenting situation which helps the students to have new authentic and meaningful learning experiences engaging their effort and behavior by providing more fun and effective learning atmosphere. In addition, it provides the opportunity for the students to work collaboratively and easily access the information that can supplement their learning experience. Those benefits become the central part of 21st century education which should be optimized in order to create sophisticated learning immersion and maximize the quality of students in the future. Duhaney (2000) argues that the infusion and integration of technology in the education process have presented new avenues by which teachers can enrich and enhance teaching and learning activities.

In today's era, technology has a pivotal role which affects to the change of the process of students' learning. Learning is not only limited by four walls classroom which places the teachers as the main sources for the students. Technology helps the teachers to create innovative teaching strategy by providing interesting activities helping the students improve their competence. Moreover, the students called as Z generation effortlessly update and get the information by the help of technology. They are easy to search the materials from the internet and increase their skills by educational technologies provided on their gadget. It is very common that students have got the material before their teachers explain it in the classroom. The use of technology in this era also gives the opportunities for the students to do collaborative work and easily connect to others people such as native speaker in order to improve their language capability. OECD (2010) points out that technology is an integral part to accessing the higher- order competencies often referred to as 21st Century Skills, which are also necessary to be productive in today's society.

However, it is very easy to find so many educational applications provided on internet which give the opportunities to make interaction between students and teacher in virtual classroom and increase their motivation to learn. In this study, several applications helping the teachers give instruction to the students are investigated. Those media, Prezi as online software presentation, Glogster as visual online poster, Edmodo as online networking application, Toondoo as online cartoon strip making and Goanimate as animated video creation, are known as web-based instructional media provided on internet.

a. Prezi

Prezi is online presentation tool providing cloud-based presentation which can be used for teaching. Perron and Stearns (2010) argue that prezi is online presentation service provider which offers different types of accounts and options for creating and storing digital presentations. It consists of a large canvas consisting of several slides which can be zoomed in and out. Furthermore, it also allows teachers to insert picture, video and power point slides which can be directly downloaded on its presentation. Chicioreanu (2010) pointed out that Prezi can offer teachers the ability to present the content of a course in a totally different manner, using graphics, tables, mental maps, animation and even sound or video.

b. Glogster

Glogster is web 2.0 for creating online poster. It allows teachers to create online board consisting of pictures, audio and video through the website Glogster (www.glogster.com). Picardo (2012) states that Glogster is an internet tool that allows users to create and share interactive posters composed of text, graphics, sound and videos. Glogster provides the opportunity for collaborative student centered learning and can be used in the classroom to create book reports, research projects, character analysis, historical timelines, and any other class or group projects. It is a creative way for students to present information beyond the typical written report (Alba et.al, 2014). By using glogster, teachers can present material in a creative way. It can help to attract the students' attention and create innovative teaching performance.

c. Edmodo

Edmodo is a learning platform allowing students and teacher to interact outside classroom. Edmodo provides the opportunity for sharing file, giving quiz and assignment, sending feedback, and also assigning students' grade. Hartomo (2016) defined Edmodo as a media of private micro-blogging service which can create an effective learning experience and allow students to exchange collective and individual feedback and responses. Edmodo is very useful to conduct out-of-class activities which are useful to support the process of learning in the classroom. Furthermore, using social media such as Edmodo can certainly increase the student's motivation and enhance the students 'engagement.

d. Toondoo

Toondoo is web-based application for creating cartoon story. It is known as easy and appealing application which can help the teachers to create picture and use it for teaching. Kirchoff and Cook (2015) point out that Toondoo is a free, fully online comic creator, one

that offers many options for comic strip creation through a user---friendly interface. Toondoo provides hundreds comic strips components such as setting, characters, props, clip, art and text bubble easily inserted on its comic strip. Moreover, Toondoo also consists of sharing options allowing the users to share their comic on internet. Kirchoff and Cook (2015) state that strength of Toondoo is its option to save and share the comic. Students can select from public (where anyone can view), private (where only they can view),and shared (where they can select who views) for their product.

e. Goanimate

Goanimate is web-based technology known as animated video creation. Kacupu et.al. (2014) state that goanimate is one of the new generation of animation technologies where users are allowed to create animations using themes that are equipped with backgrounds, characters and props that you can combine to make your animations; or users can start from scratch, select a background and drag and drop backgrounds, characters and props from the menus available on the side. This application is very useful to help teacher present powerful presentation and animation which engage the students in learning. Consequently, students' better attitudes toward learning are created.

Therefore, the research questions of this study are as follows:

1) What are the student-teachers perceptions about the use of web-based technologies for teaching English?

2) What application do they prefer to use for their teaching performance?

METHODOLOGY

The method of this study is qualitative study which investigates the student-teacher's perception on the use of media technologies for teaching English. This study is conducted during four months in Technology Enhanced Language Learning Classroom (TELL) consisting of a hundred student-teachers who become the respondents of the study. The respondents are given open ended questionnaire analyzing their perception about web-based technologies for teaching English introduced in TELL classroom. After filling the questionnaire, interview is given to six students in order to clarify the data from questionnaire. There are several web-based learning applications presented to the participants including Prezi, Glogster, Edmodo, Goanimate, and Toondoo. All of the applications need internet connection and can be used to facilitate the students for teaching English. In this study, the student-teachers are given the opportunities to practice microteaching lesson by

using those applications. They are guided how to use those media technologies and practice it in teaching English. At the end, they are required to use one of media technologies they produced for teaching English in elementary or secondary school as the final project.

FINDINGS

Preparing student-teachers to face 21st century education is a must to do. Student-teachers are necessary to have knowledge and experience in relation to the use of technology which cannot be separated from education in 21st century. In relation to face 21st century education, a hundred student-teachers in this study are prepared with the theories and practice of the use of web-based technologies to prepare their teaching in the future. There are six web-based technologies given in four months; Prezi, Goanimate, Glogster, Toondoo and Edmodo. Thus, their perception toward those tools is investigated. However, findings show that there are several themes found from the questionnaire and interview given to the respondents;

a. Media technologies can improve teachers' creativity

Using technology encourages the teachers to improve his creativity. Teacher can increase his professional development when preparing material given to the students. For instance, when delivering material by using prezi presentation, they can create interesting presentation by adding several pictures, power point slide and video and creating appealing movement which can be attention grabber for students. Based on the interview given to the respondent, "Using technology really improves my creativity. I usually want to make the students fun while learning. Using prezi, goanimate and glogster really encourages me to be a creative teacher. There are so many things I can do by using those applications and it really produces better learning environment for the students." By using technologies, teacher can easily create interesting media by their own selves. Prezi can help them to create amazing presentation which its movement is like a movie. Respondent 2 says, "Making presentation with prezi is like making movie. It encourages me to create a good presentation. I really like it and my students are also interested in it." In addition, the use of goanimate also gives positive effects on teacher's creativity. It is proven by the result of interview, "Goanimate can explore my imagination. I can't believe that I can make a movie animation for teaching. It is really marvelous. I can add my voice to the character so that I can explain the material by using those animations. It really makes me enjoy". It is in line with Perez' statement (2011) that advantages of using GoAnimate: no download and installation is needed, the option of

selecting the template, character features and adding your own scripts to the animation to create a rich animation video as a storytelling platform for self-expression and creativity.

b. Media technologies can produce better learning experience

Using technology as instructional media certainly can produce better learning experience for the students. The previous method when teacher only explains the material by using traditional media frequently made the students bored to learn. Costley (2014) argues that technology is a powerful contributor to learning if it is used to deepen students' engagement in meaningful and intellectually authentic curriculum. Technology can create interesting and various activities for the students until students can interact with their peers and teacher by the help of technology. It is proven by the result of this research finding that those tools helping provide opportunities to conduct collaborative activity. Based on the interview, respondent says, "Using Edmodo gives me the opportunity to interact with students in virtual classroom. I can easily organize the material and give them quiz. I also can organize the process of assessment because it can systematically help me to assess the students' answer on the quiz." In addition, students are also given the chances to interact and do collaborative activity with their peers, "Toondoo and Glogster are really amazing. My students can collaborate to create comic books and online poster. It can enhance their vocabulary by using interesting way."

c. Media technologies can increase the students' motivation

Teaching is not only the process of delivering material but also the process to engage the students for learning. Students should be able to have motivation to study in order to produce better learning. As a result, teacher should provide activity and tools which can motivate the students to study. Granito and Chernobilsky (2012) point out, "Because students respond positively to technology and are motivated by technology, teachers should make conscious efforts to create activities that encompass some form of technological tool." In this study, it is also proven that technology can increase the students' motivation and curiosity for learning. Respondent says, "When I deliver material by using Prezi presentation, my students' motivations are really enhanced. They watch the presentation enthusiastically and focus on what I explain in the classroom."

d. Media technologies can help to assess students

Besides helping the teachers to deliver material, media technologies also help them assess the students' ability easily. It is proven from expression given by the respondent, "Edmodo can help me to easily assess the students' quiz. I don't need to count the right answer given by the students. But the system automatically does it for me. It is really useful."

e. Media technologies can make the students focus on the material given

Media technologies really attract the students' attention. Interview result shows that the students are focused on the explanation given by the student-teachers when they use presentation tools in the classroom. The students are curious with the material given on that attractive presentation. On the other hand, the findings show that the students are easy to memorize the vocabularies given. It is different when they use blackboard as the instructional media. The students are difficult to focus on the material and hard to memorize it as well.

f. Media technologies can build teachers confidence

In this study, many student-teachers initially feel nervous to teach because it becomes their first teaching experience to teach in the school. Surprisingly, using media technologies really help them to increase their confidence. "Using technology for teaching is really amazing. I am proud and I think that I am the technological person. I can insert my voice on animation I made by using Goanimate. It really helps me to manage the classroom. The students feel enjoy and I am confident to teach."

At the end of the study, the student-teachers are required to choose one of the media technologies they made for teaching in the school. However, the finding shows that prezi becomes the most favourite media technologies for them. The result of interview shows that Prezi is the easiest and the most interesting media technologies for teaching English. In addition, Goanimate is the second favourite tool helping the respondents to create animation and great presentation for teaching. Lastly, Toondoo, Edmodo and Glogster become the last tools used by the participants.
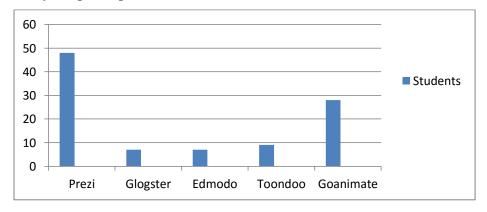

Figure 1 Most Favorite Media Technologies

On the other hand, the student-teachers are also asked to write the most challenged media technologies among five tools given. 49% of student-teachers argue that all of the media technologies are useful and easy to use. However, 21% of student-teachers state that Glogster is the worst media for teaching. It really encourages them to have high access of

internet which occasionally difficult for them. They say that they spend much time for creating poster on Glogter. Based on the interview, the respondent says, "I usually fail when inserting audio and video on Glogster. It really made me crazy. I should reinsert it for several times." In addition, they argue that the template provided on glogster is monotonous. As a result, they are usually unsatisfied with the result of glogs they made. Furthermore, 10% argue that Toondoo is not interesting for them. They say that they are most interested in audio visual media which can't be produced by Toondoo. Toondoo can't be inserted by audio and video. Thus, It frequently makes the students boring. Surprisingly, 9 % and 5% student-teachers give the opinion that prezi and goanimate also become challenges for them. It happens because those tools encourage the student-teachers to be creative to create the attractive presentation and animation for teaching. Lastly, the activities provided on Edmodo perceived as the monotonous activity for 6% students. Thus, it becomes one of the least favourite media technologies for the participants.
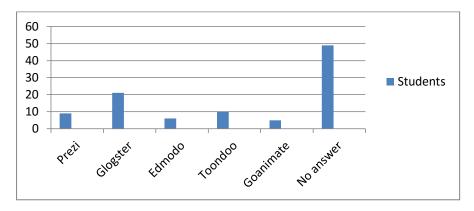

Figure 2 Least Favorite Media Technologies

DISCUSSION

The findings show that media technologies are really influential on the students' attitude toward learning and promote teachers professional development. Technology can help teacher to provide better learning environment when the students can interact with teacher and their friends through virtual classroom activities. Mokhtar (2016) argues that Edmodo allows teachers and students to communicate with each other via messages, thus providing learners with the chance to communicate and collaborate in a virtual classroom environment. Moreover, technology also provides so many applications allowing teachers to

show the materials in an interesting way. Using animation, picture story, innovative and dynamic presentation for teaching is really easy to do by the help of technology. Technology has captured the interest of children and adults alike, and this fascination is capitalized on by using it as a medium of instruction for most disciplines (Alsulami, 2016). Furthermore, Media technology becomes pivotal to use in order to face and handle the characteristics of students in today's era. It is undeniably proven that students in 21st century have different characteristics with the students coming from the previous era. Students called as millennial generations prefer to use technology for everything they do including the proses of their learning. They are more interested to learn by using technology and search information autonomously by the help of internet. As a result, teacher has to facilitate and guide the students in order to support the process of their progress in learning. It cannot be unheeded that teacher has important role to help students increase their ability. Thus, teachers are encouraged to usually update their skill and knowledge in order to help students face their learning. Eduview (2008) states that teacher is the single most important factor in student achievement.

CONCLUSION

Teaching in 21st century encourages teachers to be creative in providing interesting activities for the students. Teaching is not only delivering material and assessing the students' ability but also the process of involving the students to be active on the activities provided. There are so many media technologies in this era which can be maximized to help teachers give instruction for the students. In this study, the student-teachers' perceptions toward the use of media technologies are investigated. The findings show that they are interested in using those tools for teaching. By using those media technologies, they feel confident to teach and their creativities are also improved. Furthermore, those tools can help them to create better learning experience for the students which can increase students' motivation and make them focus on the material given. In conclusion, being able to use media technologies for teaching is necessary in order to face 21st century education. It aims to create sophisticated learning immersion and maximize the quality of students in the future.

BIBLIOGRAPHY

Alba, et.al.Glogsters and Other Motivating Technology: A Multiple Case Study of English Learners. *The Reading Matrix © 2014 Volume 14, Number 2, September 2014*

Aduwa-Ogiegbaen, S. E., &Iyamu, E. O. S. (2005). Using Information and Communication Technology in Secondary Schools in Nigeria: Problems and Prospects. *Educational Technology & Society*, 8 (1), 104-112

Alsulami, Salmah. (2016). The Effects of Technology on Learning English as a Foreign Language Among Female EFL Students at Effatt College: An Exploratory Study. *Studies in Literature and Language Vol. 12, No. 4, 2016, pp. 1-16*

Banstrom, Camilla. (2011). *Using the Internet in Education-Strength and Weaknesses*.HogskolanIgaple: Sweden

Chicioreanu, T. (2010).An awesome online presentation tool-Prezi. *Petroleum-Gas University of Ploiesti Bulletin, Educational Sciences Series, 62*

Chicioreanu, T. D. and Oproiu, G. C., (2012). New Ways to Present the Information in the Teaching Activity. Paper presented *Conference proceedings of" eLearning and Software for Education"(eLSE)*, 90-95. Retrieved from http://search.proquest.com/docview /1287962851?accountid=34864

Costley, Kevin C. (2014). *The Positive Effects of Technology on Teaching and Student Learning*. Unpublished: Arkansas Tech University

Clements, D.H., & J. Sarama. (2003). "Strip Mining for Gold: Research and Policy in Educational Technology: A Response to 'Fool's Gold.'" *AACE Journal*, 11 (1): 7–69

Dede, Chris. (2008). *Technological Supports for Acquiring 21ˢᵗ Century Skills.* Cambridge: USA

Duhaney, Dvon C. (2000). Technology and the Educational Process: Transforming Classroom Activities. *Int'l J of Instructional Media Vol. 27*

Eduview. (2008). *Teaching in 21ˢᵗ Century*. Available at: https://www.blackboard.com /resources/k12/k12_teaching21st_final.pdf

Granito and Chernobilsky. (2012). *The Effect of Technology on a Student's Motivation and Knowledge Retention*. NERA Conference Proceedings 2012. 17.Available at: http://digitalcommons.uconn.edu/nera_2012/17

Hastomo. (2016). The Effectiveness of Edmodoto Teach Writing Viewed from Students' Motivation.Prosiding ICTTE FKIP UNS 2015 ISSN: 2502-4124 Vol 1, Nomor 1, Januari 2016

Kacupu, et.al. (2014). Investigation of Pre-Service Science Teachers' Opinions about Using GoAnimate to Create Animated Videos.*Turkish Online Journal of Qualitative Inquiry, October 2014, 5(4)*

Kirchoff and Cook. (2015). Overviewing Software Applications for Graphic Novel Creation in the Post-Secondary and Secondary Classroom.*SANE Journal: Sequential Art Narrative in Education Volume 2 Issue 1 Imagining, Re-imagining, and Examining*

Kurt, S. (2010). *Technology use in elementary education in Turkey: A case study*. New Horizons in Education, 58(1), 65-76

Mokhtar, F. A. (2016). Rethinking Conventional Teaching in Language Learning and Proposing Edmodo as Intervention: A Qualitative Analysis. Malaysian Online Journal of Educational Technology , 4(2), 22-37.

OECD. (2010).*Inspired by Technology, Driven by Pedagogy: A systemic Approach to Technology-Based School Innovations*. OECD: Paris, France

Perronand Stearns.(2010). A Review of a Presentation Technology. *Research on Social Work Practice 000(00) 1-2*

Picardo, Jose. (August 24, 2012). Using Glogster as an Assessment Tool.*Box of Tricks:Education and Technology*. Retrieved fromhttp://www.boxoftricks .net/tag/glogster