The Use of Web 2.0 as Supplementary Tools to Assist Students' Writing Activity

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Abstract

The study investigates the use of Web 2.0 in assisting tertiary students in their writing. Four (4) types of Web 2.0 tools namely Edmodo, YouTube, Prezi and Padlet were employed to assist students in writing essays. The objectives of this research are to identify the significant difference in students' scores between pre-test and post-test in essay writing using Edmodo as well as to explore students' opinions on the use of YouTube, Prezi and Padlet in assisting them to prepare their writing task. The study uses mixed-method research design where quantitative data were gathered through student performance in a pretest and posttest of a writing test. For qualitative data, students' responses pertaining to their perceptions of using YouTube, Prezi and Padlet were collected from their remarks made in 'Type a reply' in Edmodo. The results showed that there was a significant increase in students' pre and post writing tests while students demonstrated positive perceptions in the use YouTube, Prezi and Padlet. The students also demonstrated positive remarks in the use YouTube, Prezi and Padlet.The study implies that the Web 2.0 tools namely Edmodo, YouTube, Padlet and Prezi employed in the study can be sources or tools for teaching and learning writing via online.

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Keywords: Essay writing, Perception, Web 2.0 tools

INTRODUCTION

The use of Web 2.0 in education is not new in teaching and learning in the 21st century. In fact, it has begun in 2004 (Richardson, 2008) wherein it is accustomed to evidence that teachers and students use the platform to manage their classes. Although Web 2.0 is a term frequently used in the literature, it is necessary, however, to define the term here. Richardson (2008) defines Web 2.0 as the shift to new approach of using the internet for its users to ensure participation and interaction among teachers and students. In the present study, Web 2.0 refers to the educational resources that are available online such as Edmodo, YouTube, Prezi and Padlet. These tools are the main learning platforms employed in the study to identify their usefulness in assisting students to write essays.

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Edmodo is employed in writing classes to ensure that students know the progress of their writing. The progress is evident in such a way that they can edit their works before they submit their final essays that are edited and commented by the teachers or peers. In other words, when students submit their works for the first time, they will be receiving some feedback or comments from their teachers. Based on the feedback or comments, they are required to make necessary amendments. Assuming that teachers are still not satisfied with the students' works for the second time, on-going works for editing can be made by the students. This process is dynamic since students are able to obtain feedback via online and able to ask their teachers for items they are not clear by using the platform.

In the current study, another three (3) Web 2.0 tools namely YouTube, Padlet and Prezi were employed to help students in their writing. The use of YouTube, as shown in a research motivates students to learn better (Yuen, 2015), and Padlet provides students with non-threatening environment for learning (Fuchs, 2014). In fact, students use Padlet to collaborate since everyone is able to contribute ideas. In relation to its use in writing, the Padlet wall encourages students to brainstorm their ideas before they begin writing their essays (Weller, 2013). Meanwhile, Prezi is a presentation tools that is used to show points collected after students brainstorm their ideas about a particular topic. Osorno (2015) describes that it is a storytelling tool to present information that students need to narrate equipped with zooming interface which presenters are able to highlight points to be addressed.

With the uses of these Web 2.0, in particular Edmodo, the study attempts to seek answer if there are any changes in results after students use the platform to assist in writing their essays. In addition, the use of Padlet, Prezi and YouTube are for the purposes of identifying the students' opinions on the use of the tools to support their preparation in writing their essays. Therefore, this paper seeks to address the following questions: 1) Is there any significant difference in students' scores between pre-test and post-test when Edmodo is used to write their essays? 2) What are the students' perceptions on the use of YouTube, Padlet and Prezi in assisting students to prepare their writing?

LITERATURE REVIEW

Currently, there are numerous social networking sites namely blogs, wikis and social bookmarking tools (Richardson, 2008). However, for teaching and learning, particularly for writing purposes, it seems that Edmodo has become a popular platform to assist students in their writing (Coelho, Galante, & Pires, 2016). In addition, Edmodo offers students to write their essays online. Their writing then can be checked by teachers as the tool provides marking assistance by clicking 'annotate'. Marking is convenient as teachers are able to provide comments and edit sentences that are written by the students. In addition, YouTube enables students to watch videos that are related to the topics they are studying. While Prezi serves as the alternative to using Microsoft Power Point for presentation. Padlet, on the other hand, enables students to brainstorm ideas among their peers before starting to write essays. Nevertheless, the proceeding discussions explain the uses of these Web 2.0 as sources to supplement students' writing effort.

2.1   YouTube

YouTube is an internet television that reaches millions of people online. Such is the scenario since the internet has shifted to disseminating information from text to music; and with YouTube, information can be shared via videos (Hartley, 2009). With the slogan 'Broadcast Yourself', users are able to broadcast themselves and their videos can be watched by others globally (Hartley, 2009). Khan (2017) found that participants in his study viewed that the platform provided a relaxing entertainment and it was the motive that made them like the videos that were posted. In addition, employing Uses and Gratification framework in his study, it was interesting to find that anonymity played a role in sharing and uploading videos. In fact, it was the motivation that made users became participants whether they would be viewing the videos posted or sharing the videos they produced. Also, it was evident that males were more likely to dislike YouTube videos in comparison with females as the researcher believed that such was participatory rather than intentionally. Also, YouTube was employed to post the recorded online webinars and live quiz

among physicians and medical students (Sabouni, Chaar, Bdaiwi, Masrani, Abolaban, Alahdab, Firwana, & Al-Moujahed, 2017). Their study found that the low-cost blended approach was benefitted by the mass of audience participated in the research who were mostly novice researchers and students in the Arab region. It was also found that YouTube provided a satisfying experience especially in their needs to learn writing and publishing.

2.2   Prezi

Presentation software has centred on PowerPoint for at least the last 20 years (Parks, 2012). While using PowerPoint in the classroom was considered to be the cutting edge, it is now seen as the epitome of boring. Using PowerPoint typically fails to capture students' interest and/or excite them. Therefore, it is no longer works as a tool to engage students in teaching and learning process unless it involves more sophisticated elements such as movement (Clark, 2008). Other options for presentations are available; one such option is Prezi.

McKenna (2016) argues that Prezi can be regarded as a platform for text production although majority use the tool for reading. To the researcher, Prezi is akin to canvas in that one may insert text, images, audio, hyperlinks and videos in his/her presentation. In other words, one can use a video to present his/her idea while uses images to present another idea. In fact, one may organise the way he/she wants to present his/ her writing whether to be in spatial or juxtaposition. Moreover, Prezi is a productive presentation tool since students are able to get better results (Kiss, 2016). In Kiss's study, Prezi was used among students at higher education to write two (2) academic papers for a particular semester. Compared to Power Point, Prezi enables the students in the researcher's study to not only present their writing but also add images, tables, texts and frames.

2.3   Padlet

Padlet is a versatile free online tool for teachers to gather feedback from students as part of formative assessment. It also serves as a visually attractive tool for individuals or groups of students to present ideas in a way which can be edited, kept private to a user, or shared with specific individuals, or made public. Padlet works on any internet-enabled device, whether PC or mobile device as no software or apps are required to be downloaded or installed. Unlike the linear rigidity found in some discussion board layout, Padlet is not so rigid compared to other forum-based platform. It is a reliable and good platform for students and teachers to develop multimedia content for collaboration with other users (Woo, Chu, Ho & Li, 2011).

Fuchs (2014) employed Padlet to promote participation and engagement among students. It provided the opportunity for students to contribute as well as learn from others in a non-threatening environment. The graffiti wall; as the researcher claimed, enabled their ideas to be heard by everyone in the class. Padlet is also an essential learning tool on the web (Boss & Krauss, 2014). It enables its users to express their thoughts on general issues by sharing images, videos documents or sticky notes freely on the wall.

2.4   Edmodo

Edmodo is a private social networking site which provides a secure and safe platform for the teachers and students to interact and communicate with each other. The interface of Edmodo is very similar to Facebook and it is a free application (Haefner & Hanor, 2012). According to Malespina and Butler (2013), many teachers and students choose Edmodo because of these features: allows communication between teacher-students, allows communication between teacher-parents, prepares online assignments and homework; helps to create a paperless learning environment, allows to retrieve and download notes and files used in the classroom via the backpack feature, uploads and compiles all notes and files together in one place before disburse them to the students using its library features.

Edmodo was employed to gain new understandings and perceptions of certain topics (Gan, Menkhoff & Smith, 2015). Students were able to participate in discussions by writing posts or comments and

consequently enabled them to reflect on the lesson they have learned. Additional course content such as videos and articles are linked to enhance the learning and allow for personal exploration. In addition, Dogoriti and Pange (2014) also found that Edmodo was proposed as the best practices in foreign language classroom especially in teaching English for Specific Purposes (ESP). Similarly, Thongmak (2013), examined the students' views on the use of Edmodo as a classroom collaboration tool. The researcher found that Edmodo could support both distance teaching and fulfil physical classroom learning. Furthermore, Kongchan (2012) explored the possibilities of a non-digital-native teacher to use Edmodo and the results reveal that Edmodo was perceived to be a user-friendly social learning network. In addition, Holland and Muilenburg (2011) have studied students' participations in literature discussions using Edmodo discussion boards. The results revealed that Edmodo was perceived to be an effective platform for students' participation and engagement.

2.5   Conceptual Framework

The conceptual framework illustrates the independent variable and dependent variable of one's study. In the current study, the independent variables are Web 2.0 namely Edmodo, YouTube, Padlet and Prezi that are employed for writing task. Meanwhile, the dependent variables are the students' scores in pre and post writing tests and their perception in the use of the YouTube, Padlet and Prezi. Figure 1 illustrates the theoretical framework of the study.
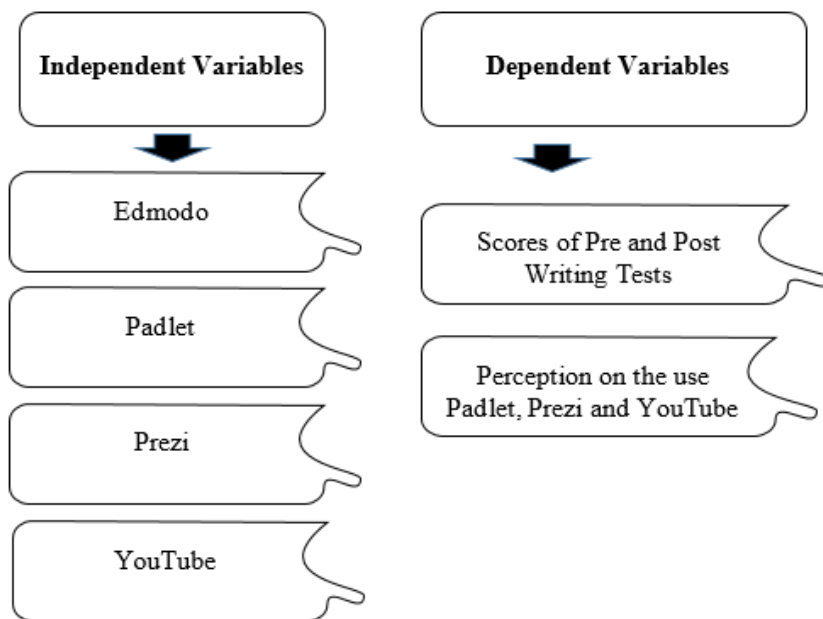

Figure 1. Conceptual Framework of the Study.

METHODOLOGY

3.1   Research Design

Qualitative and quantitative methods were employed in the study in that the quantitative data involved conducting an experimental study; in particular administrating pre and post-tests using Edmodo. In addition, qualitative data of the interviews were conducted to identify students' perceptions on the use of YouTube, Padlet and Prezi.

3.2   Samples

There were 17 students who took part in the pre and post-test essay writing. Such number of subjects is sufficient since an experimental study needs to involve at least 15 subjects (Green, Salkind & Alkey, 2000; Gay, 1999) as to show a fairly strong effect after treatments are administered to them. These students were taking engineering majors in Universiti Malaysia Pahang (UMP) at the time the study took place. Specifically, there were seven (7) students from the Faculty of Manufacturing, another seven (7) students are from the Faculty of Manufacturing while the remaining students; three (3) students, are from the Faculty of Electrical and Electronics Engineering.

3.3   Research Instruments

The study required students to write an argumentative essay entitles 'Green Technology'. Students were required to write approximately 350 words in an hour using Edmodo as a platform for the writing purpose. In terms of evaluating the essay, four (4) categories are employed. These are 'Introduction' (Background and Thesis statement) that constitutes four (4) marks, 'Body' paragraphs contribute four (4) marks, 'Conclusion' constitutes four (4) marks while 'Language' contributes the highest marks i.e. eight (8) marks.

3.4   Data Collection Procedures

In this study, the data collection was done following these steps. Students were first asked to take a writing pre-test in Edmodo outside the class hours. Their works were evaluated by the teacher-researchers for the first time. Improvements on students' writing were made by the teacher-researchers as they checked the students' essays. Then, notes were presented in YouTube, Prezi and Padlet to help them learn writing the argumentative essay. Links of all the materials (YouTube, Prezi and Padlet) were given in Edmodo. They were required to study the notes at their free time. At the same time, they were asked to give their opinions of using the three (3) tools by writing the comments in Edmodo. After two (2) weeks of studying the notes, the teacher - researchers then instructed the students to write their essays for the second time for the post-writing test. The use of all the tools are described in the following discussions.

3.4.1   Edmodo

In writing the pre-test essay, students were required to do the task using Edmodo outside the class hour. As the research materials, the platform is used according to these procedures. The teacher - researchers, in the first place clicked 'Assignment' to begin assigning students to write the essay. He/she described the task that the students needed to perform in 'Assignment'. The task of the student then was to click on the 'Turned In' after they completed writing their essays. Figure 2 shows the notification that was made by the teacher - researchers in assigning students to write essays.
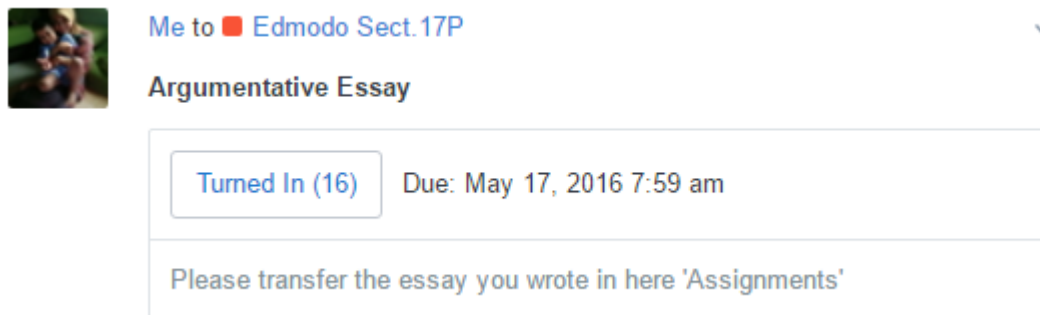

Figure 2. Snapshot of Writing Task in Edmodo.

After students wrote the essay, the teacher - researchers evaluated the students' works by clicking 'Annotation'. The features in Edmodo for instance 'Comments', 'Draw', 'Highlight' and 'Strikethrough' are used for the purpose of checking the students' works. Figure 3 shows a snapshot of the marking features use by the teacher - researchers.
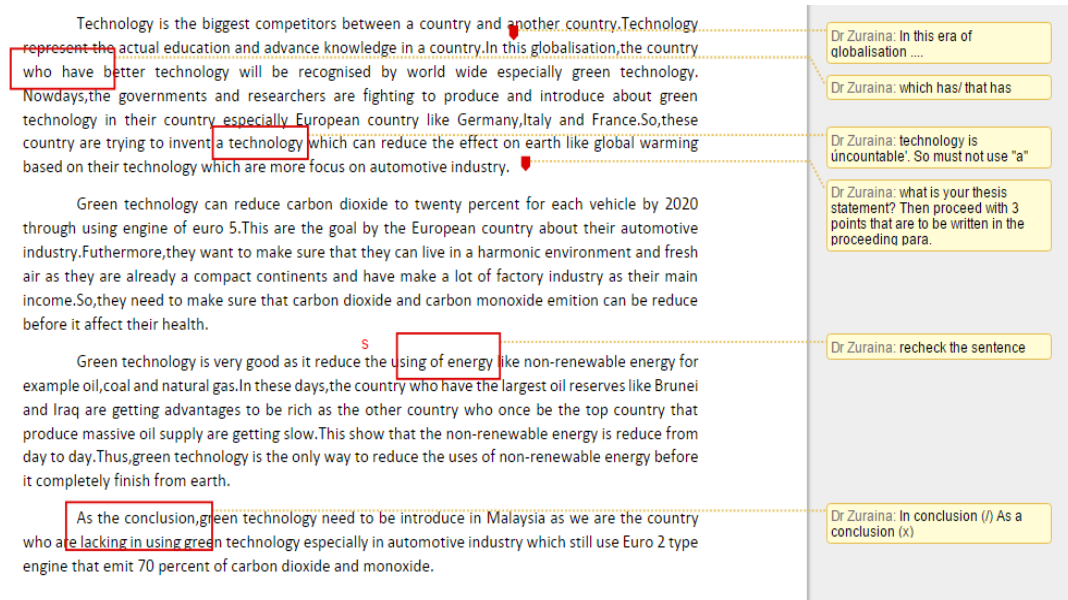

Figure 3. Snapshot of Marking Features in Edmodo.

3.4.2   Padlet

For Padlet, students used this platform to provide written comments, add video clips and pictures and share links. One special 'Wall' on Padlet was created to ask for the student's opinion on the use of Padlet in the classroom. In the classroom, the teacher - researchers used Padlet during the brainstorming process on the topic 'Green Technology' before they begin writing. The students then discuss and right away started posting out their ideas on the 'Wall'. Figure 4 shows the snapshot of students' opinions on the use of Padlet in the classroom for brainstorming process before they began their essay's writing.
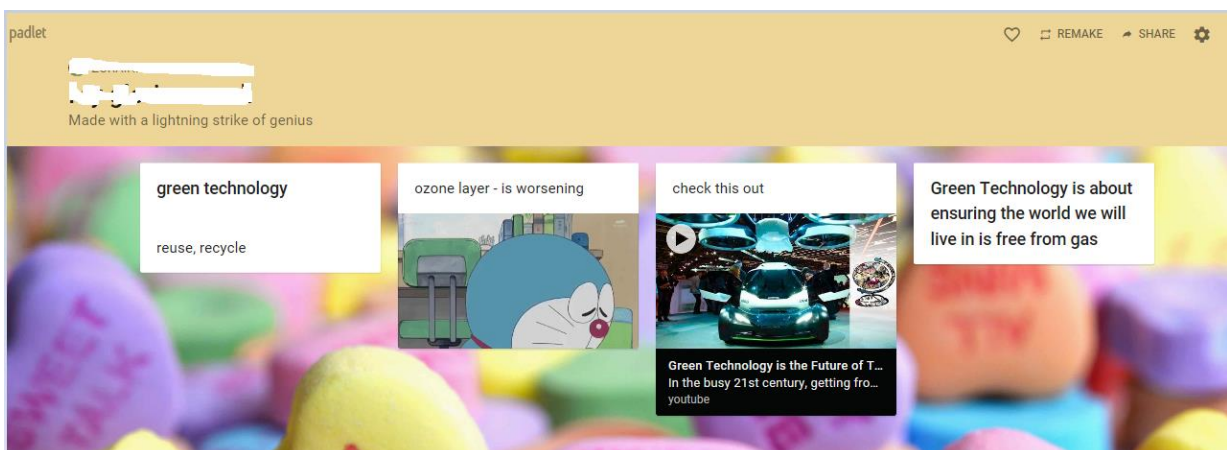

Figure 4. Snapshots of Students' Opinions on the Topic 'Green Technology'.

3.4.3   Prezi

In the study, Prezi was used to present lecture notes that are prepared by the teacher - researchers. Students are required to read notes that are presented in Prezi about how to construct essay for argumentative essays. The notes are presented in the forms of graphic organizers that include concept maps, mind mapping and non-linguistic representation of notes. The snapshot of lecture notes using Prezi is shown in Figure 5.
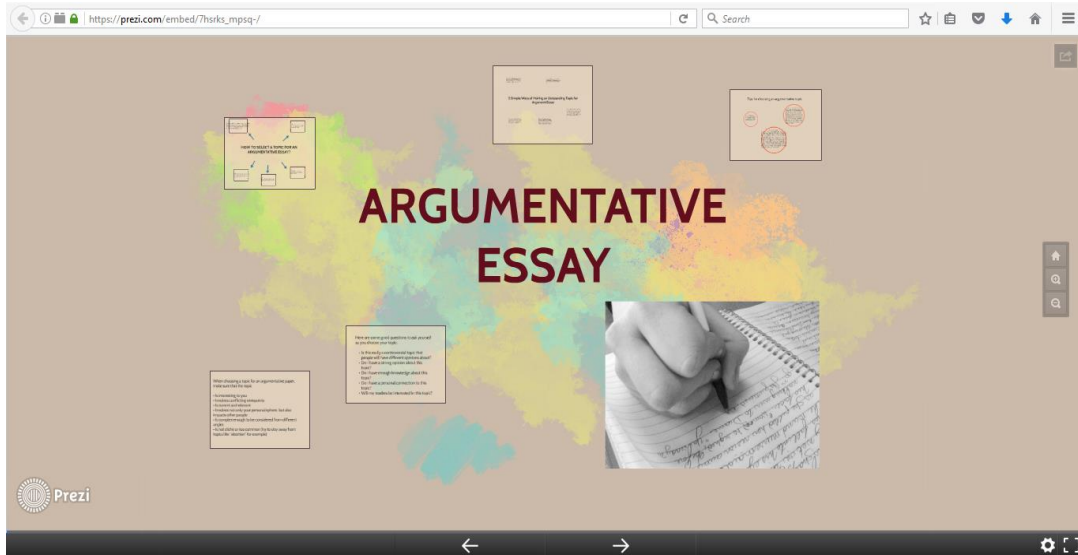

Figure 5. Snapshot of Lecture Notes Using Prezi.

3.4.4   YouTube

Videos on argumentative essays in YouTube were selected to let the students have the ideas on the type of the essay they were required to write. Having to click on the 'Search' button in YouTube, the researchers selected at random the videos that were suitable to be viewed by the students. In informing the students of the selected videos, the researchers provided the links (URL) to them via Edmodo. Figure 6 shows a snapshot of one of the videos for argumentative essays from YouTube used in the current study.

Figure 6. Snapshot of a Video in YouTube for Argumentative Essay.

3.5   Data Analysis Procedures

In analysing the data, t-test was employed to identify the differences in scores of students' essays between their pre and post-tests. Data collected during these two (2) phases allow the researcher to observe the differences and similarities that took place before and after data were collected. Students' perceptions on the usefulness of YouTube, Padlet and Prezi's applications in assisting them to prepare their writing were obtained from their comments that were made in Edmodo. Specifically, they wrote their opinions in 'Type a reply' that is located below the teacher - researchers' status. Having had all the comments, the data then was interpreted to fit with thematic analysis in that the researchers need to interpret the data that was generated by the participants so as to explain the latter's behaviour, actions and thoughts (Creswell 2009; Hatch, 2002). With this in mind, thematic analysis is considered suitable to deal with the type of data, through which the researchers can highlight the differences and similarities apparent within the data set (Boyatzis, 1998; Creswell 2009). In reporting students' perceptions on the use YouTube, Padlet and Prezi, they were codified in that responses from student number 1 was written as 'Student 1', responses from student number 12 was written as 'Student 12'.

FINDINGS AND DISCUSSION

4.1   Is There any Significant Difference in Pre and Post-tests' Scores when Students Write their Essays Using Edmodo?

A paired-samples t-test was conducted to evaluate the difference in scores between the pre and post-tests. There was a statistically significant increase from the pre-test (M=5.76, SD=2.11) to the post-test [M=12.18, SD=3.70, t (16) = -6.27, p<.0005].

Table 1. Descriptive Statistics of the Paired-sample T-test Analysis

	Mean	N	Std. Deviation	Std. Error Mean
Pre test	5.76	17	2.11	.511
Post test	12.18	17	3.70	.896

Table 2. Paired-sample T-test of Pre and Post Essay

	Paired Differences			T	df	Sig. (2-tailed)
	Mean	SD	Std. Error Mean			
Pre-test - Post test	-6.41	4.21	1.02	-6.27	16	.000

From the results, it showed that there was a significant difference in students' scores with regards to the use of Edmodo in their pre and post writing tests. These results match those observed in earlier studies. Kongchan (2013) found that the uses of Edmodo enabled teachers to check, comment and suggest their students' writing works. In the researcher's study, Edmodo was used as it was found that the class could be managed with flexibility. The students were able to work on their own and were occupied with the writing tasks. They also conducted the task according to their writing ability. In the current study, the writing task that was administered outside the class hours enabled students to work independently. After they submitted their works, their essays were evaluated by the teacher – researchers. The use of 'annotate' in Edmodo enabled the teacher – researchers to use the features i.e. 'comment', 'highlight', 'draw', 'text'

and 'strikethrough' in evaluating their students' works.

The results from the current study supported the idea that Edmodo improved students' ability in writing as it was found in Shams-Abadi, Ahmadi and Mehrdad's (2015) study. The students in their study worked together in that they shared the writing of their paragraphs so as to complete a full essay using Edmodo. Some members also provided comments or feedback, asked questions and shared links in their effort to complete the writing task. On the contrary, in the current study, students did not receive comments or feedback from members of their groups. They received comments only from the teacher-researchers.

Nevertheless, Ali (2015) found that students has a mixed review in the use of Edmodo. Some had positive while others demonstrated negative feelings on its use in English proficiency class. Some liked the use of Edmodo since it is a user-friendly platform and able to increase their language skills. Others; however, viewed that Edmodo was not able to assist the required English skills; for instance, presentation skills. Thus, students in the study argued that the use Edmodo depended on the kind of activity that was assigned to them.

4.2 Students' Perceptions on the Use of YouTube for Essay Writing Activity

Results from the study showed that students understood the concept of writing better when they watched YouTube. They were able to digest and process the message after watching YouTube which was related to the writing topic. The animation (visual) and the sound helped a lot to make them obtain better understanding in preparing their writing for argumentative essay. Excerpts from the students using YouTube were demonstrated:

S6:   For YouTube, it is much better to understand a specific topic without getting bored as it has the sound, animation, graphic and other elements.

S9:   In my opinion, learning through video (YouTube) is the most effective because video does not contain only text but it has amazing graphics do not make student bored even understand the argumentative essay. From this video, I learn about argumentative essay should started with question analysis, planning and layout."

S2:   Video one of the wonderful tools to help student better understanding about the topic. Because it was combination of audio, animation, pictures and other.

A student responded that YouTube offered better understanding when the platform was compared to Prezi in providing sufficient input in students' writing. Student 4 said:

S4:   After viewing this video, my understanding about argumentative essay is deeper. Learning through video is interesting as we are watching a movie. Other than that, the moving picture avoid me from being easily bored and sleepy. Thus study through video is quite interesting than using Prezi and Microsoft power point.

The results of the study on the use of YouTube showed that the tool helped students to understand the concept of writing essay better than without using it. In fact, the findings showed that students perceived positively on the use of YouTube in improving their writing skills. Such was observed since animation, sound and picture have made the presentation became more attractive and interesting for the students (Yuen, 2015).

4.3 Students' Perceptions on the Use of Padlet for Essay Writing Activity

In relation to the research question posted, the students found that Padlet enabled them to throw ideas with less stress while discussing the topic at hands. Student 13 gave the following comment:

S13:   Less stress because I don't need to go to my friends place for discussion, just use Padlet and post my ideas.

Students agreed that Padlet was a user-friendly and an attractive learning platform. Such is true since learners' anxiety level would increase if an online platform is less user-friendly and reduces precious time for effective collaboration (Resta & Laferriere, 2007). Some interesting comments that were given are:

S1:   I like it. It's easy and I can share my ideas with my classmates…"

S3:   I don't have to stand and speak in front of the class anymore. Just post my ideas using Padlet and it's done!"

The perceptions from the students showed that they were able to share ideas among themselves as Padlet helped them to brainstorm their ideas for writing essays. According to Resta and Laferriere (2007), Padlet allows students to reconstruct new ideas among each other easily. In fact, having such a learning environment, creates an enjoyable and flexible learning time and space. Once they are connected, they are able to work independently on the assignments. Therefore, it can be stated that students perceived positively on the use of Padlet to improve their writing skills. They were able to demonstrate the use of Padlet in communication successfully. Nevertheless, according to Thompson (2008), lessons must be designed carefully to ensure that Web 2.0 tool such as Padlet provides positive implications to the students and teachers. In addition, teaching and learning by using Prezi provides a new technique in terms of focusing and attracting students' attention in teaching and learning process. Therefore, by using a proper way of teaching and learning, students can achieve a certain improvement in the assessment.

4.4   Students' Perceptions on the Use of Prezi for Essay Writing Activity

As stated in the earlier discussion, Prezi was used by the teacher as a tool to present lecture notes and it was also used by the students to write the outline of their argumentative essays. Students reported on the perceived ease of use of the application in the remarks below:

S8:   Prezi is easy to use and free of charge.

S14   It is easy to use and is something new to me.

S17:   I learnt about Prezi presentation and it is very interesting.

These responses indicated that Prezi functions were user friendly. Learning to use Prezi was easy for them even without a formal training. In the study, it was demonstrated that the students had the ability to use Prezi effectively. In addition, when the teachers used Prezi as a tool to present their lecture and notes, students responded positively such as:

S7:   Prezi usage in teaching & learning makes me maintain my concentration…

            I like to learn this subject by using Prezi…

These clearly showed that students perceived the usefulness of Prezi as it was able to capture their interest in the classroom. Moreover, the students' attitude towards incorporating Prezi in writing their outline was also positive. The students were recorded to give feedback such as:

S5:   I can put lots of things and present it to my teacher…

S10:   I love Prezi because I can do lots of things with it…

The students had positive attitude when it comes to incorporating Prezi into their classroom setting as the students believe the use of Prezi application will make learning more interesting. In short, most of the students did find Prezi as a useful and easy to use application especially in tertiary educational setting. Comparing Padlet and PowerPoint, it seems that the latter fails to capture students' interest as it no longer works as a platform to engage students in their learning process (Clark, 2008). On the other hand, teaching

and learning by using Prezi provides a new technique in terms of focusing and attracting students' attention in the classroom and it also opens up a new way for students to present their essay writing to the teachers and their peers as Prezi has the zooming element and other exciting functions (Spernjark, 2014). The finding also supported Robert et al.'s (2013) study who found that that Padlet could improve communicative skills of learners by actively interacting with each other when they used the platform.

CONCLUSION

From this study, there are a few implications especially for the teachers and students in relation to the use of Web 2.0. Teachers may use Edmodo as a source or tool for teaching writing. It is easy to use Edmodo in the classroom or even when giving homework to the students. Furthermore, teachers can easily track the students' works and get notifications from students with the use of Edmodo. On the other hand, for students, they may get immediate feedback from teachers without having one-to-one meeting with their teachers. In addition, students can improve their writing skills by getting transparent feedback using the ubiquitous learning platform. Based on the results gathered in the current study, online tools such as Edmodo, YouTube, Padlet and Prezi are useful to support their learning in the course of writing argumentative essays. In light of the results presented in this study, future research might include larger number of participants with hopes of better understanding the participants' experiences on the use of the Edmodo, YouTube, Padlet and Prezi in the writing classroom.

ACKNOWLEDGEMENT

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