

Conference Paper

Engaging Students through Multimodal Learning Environments: An Indonesian Context

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Abstract

A critical issue regarding the English language teaching in the Asian context particularly in Indonesia is that the teaching and learning methods used are still far from being sufficient and effective to help students improve their language skill at the expected rate. This is a pilot study investigating the effects of multimodal learning environment on students' learning outcomes connected to students' writing performance. To find out the answers to the research problems, 60 students taking English for Specific Purposes at State Islamic University of Malang – Indonesia participated in this study. They were randomly selected and randomly assigned into the experimental group and the control group. The multimodal environment was provided to the experimental group whereas the control group was not. The results of the study indicated that the students in the experimental group had better writing performance. In addition, the contribution of this study is two folds; as a contribution to references on innovative and creative pedagogy in the classroom and to support the progress of the teaching and learning English.

Keywords: multimodal learning environments, video, the teaching of EFL writing, writing performance

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1. Introduction

With the rapid advancement of technology, multimedia has emerged as an innovative learning concept, and is successfully applied to many English classrooms. Multimedia provides many opportunities to present multiple representations of content knowledge. As pointed out by [12] that multimedia refers to the multiple representations of content in which it is possible to combine text, video, audio, images, and interactive elements. Therefore, it involves not only delivering information in different presentations but also creating interactivity between these representations that may lead students to perceive the content knowledge easily which leads to the learning improvement. In [20] discuss a number of benefits of multimodal learning environments, for instance, by providing external representation of the information into more attractive and motivating representation, students' attention are maintained and complex information is easier to comprehend. Multimodal learning environments also allow to present instructional media in more than one mode of presentation that

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provides students with a wider variety of students learning styles. In [3] state that multimedia can be used to develop more inclusive and appealing learning ways than visual, aural, and kinesthetic students. Accordingly, if utilized through thoughtfully planned activities, multimodal presentations, using subtitled video for instance, can assist students to use both visual and auditory messages to help students develop language skills.

Studies on multimodal learning in English classroom have attracted educators and researchers. They reveal that multimodal and its role in enhancing language learning cannot be denied. Multimodal,—in this case video—offers language students a chance to improve their language skills and language components [7, 9, 13]. This statement gives support to findings identified by [14] that the use of multiple representations in learning environments can facilitate understanding. For instance, when a concept cannot be fully communicated by written words, a visual representation can remedy the communication problem. Besides these advantages, a study by [4] concludes that multiple representations – in this case, video – in the foreign language classroom increases students' motivation, attracts students' attention, and raises their interest offering a way to contextualize language learning.

In a similar way, [16] mentions that multimodal environment allows students to experience learning not only in ways they are most comfortable, but also in challenging them to experience and learn in other ways as well. In addition to the benefits of video to language students, [6] states that students exposed with learning which incorporates multimodal approaches, on average, outperform students who learn using traditional approaches with single modes. In [19] also found video document in the target language is the most beneficial to improve students' speaking performance in the target language. Yet, studies on using subtitled videos in writing classroom to develop students' writing skill have not been well documented. The widely available literatures on subtitled videos tend to be much concerned on speaking, reading, and listening skills, and language components. In addition, subtitled videos can be used in writing classroom since they can stimulate writing [17]. This statement supports [10] and Akbulut's ideas [2] that there is an impact on the use of audiovisual aids to vocabulary learning leading to writing improvement.

With regard to the teaching of English in Indonesia, writing skill is an essential part along with the other three language skills - reading, speaking, and listening. However, it has been argued that among the four language skills, writing is a difficult skill to be learned by most of EFL students [18, 21]. This phenomenon happens because 'writing is a complex process' [15] and it is not easy to master because of the difficulties in generating, organizing, and translating ideas into a readable text [17]. Another aspect that contributes to the students' problems in writing is that the teaching and learning methods used are still far from being sufficient and effective to help them. Thus, in

respect to this fact, EFL writing teacher should use instructional media and activities which are effective and encourage students to be more motivated so that the students' writing skill can be improved.

In short, empirical studies devoted to examining multimodality in English classroom, particularly in writing classroom have been overlooked and are, therefore, limited in number. This study is initiated to find the best method to improve students' writing performance by comparing multimodal learning with traditional learning in writing classroom. The problem in the present study is specified in a single question as follows: "Do the students taught by using multimodal learning environment have better writing performance than those who do not?"

2. Method

This section provides information regarding the research design, subjects, instruments, data collection procedures, and data analysis. The study is an experimental as it tries to investigate the impacts of multimodal learning on students' writing performance. To find out the answer to the research problem, 60 students taking English for Specific Purposes at State Islamic University of Malang – Indonesia participated in this study. They were randomly selected and assigned into two groups - the experimental group and the control group. The experimental group was exposed to multimodal environment whereas the control group was not. 30 participants were involved in the experimental group and 30 participants in the control group. To obtain the data, two research instruments were used in this study. The first instrument was a writing test considered as a pre-test which was done before the treatment and a post-test that was conducted after the treatment, both of whose aim was to know the effect of multimodality learning on students' writing skill. The last instrument was a scoring guide for the writing tests.

The data collection was undertaken in the following procedures. First, the students were asked to write an essay to see their entrance behavior, and this was considered as a pre-test. Second, two different writing strategies were implemented during the treatment session. The first group was experimental group; they were exposed to multimodal learning environment. Thus, in the teaching and learning process, in the pre-writing activity in particular, the students were given a subtitled video as a strategy to improve their writing. Different from group 1, the second group, as a control group was exposed to the traditional way of teaching and learning process. In this case, the students were given a model text to read as a strategy. After giving the specified treatments to each group, the students were assigned to write a new essay based on the topic given, and it was considered as a post-test. A writing test or post-test was administered to both groups to evaluate the effectiveness of the treatment exposed in the previous meetings.

Group	N	Mean	Std. Deviation	Std. Error
Control	30	62.1414	8.10452	1.25771
Experimental	30	61.1717	4.15987	1.12271

TABLE 1: Descriptive Statistics for Control and Experiment Groups on the Pre-test.

Group	N	Mean	Std. Deviation	Std. Error
Control	30	68.3636	10.42936	2.22326
Experimental	30	82.8283	6.89817	1.48069

TABLE 2: Descriptive Statistics for Control and Experiment Groups on the Post-test.

Finally, by using a scoring guide, two raters scored the students’ compositions in order to get highly trustworthy data. These activities were followed by data analysis. The data gathered were then analyzed using t-test for independent samples. It is intended to know the effectiveness of multimodal learning environment on students’ writing skill.

3. Findings and Discussion

3.1. Findings

In this section, the results of both pre-test and post-test are reported. The independent sample t-test results showing the students’ writing performance in the control and experimental groups on pre-test and post-test are presented in Tables 1 and 2.

As presented in Table 1, the mean score of 62.1414 with a standard deviation of 8.10452 is obtained for the control group, while the mean score of 61.1717 with a standard deviation of 4.15987 is gained for the experimental group. Based on the statistical data presented in Table 1, it is clear that there is no significant difference between the two means of control group and experimental group. Therefore, it can be summarized that the two groups were homogeneous in their writing skill before the treatment.

Regarding the result of post-test as shown in Table 2, the independent sample t-test indicated that the difference between the two means of control and experimental group is statistically different. The findings for the post-test show that the mean score for experimental group is higher than control group, which is 82.8283; whereas the mean score for the control group is 68.3636 where the Sig. (2 Tailed) is .000. This shows that the experimental group outperformed the control group. Accordingly, it can be said that the students’ writing skill in the multimodal learning group had increased

significantly more than those in the control group who received instruction through model texts or printed materials. In light with this, the results of the study reveal that implementing multimodal learning is effective in improving the students' writing performance.

3.2. Discussion

In relation to the above descriptive presentation of the analysis, this study confirms that multimodal learning environment – in this case, exposing students with video and its contribution of teaching and learning strategies to writing performance - is significant. Hence, using multimodal learning or video in writing classroom has benefited the students in the experimental group. It is shown that students' writing performance in the multimodal learning environment has improved compared to those in the control group or in the traditional teaching method. This finding is different from what researchers and theorists believe that reading and writing are usually described as 'parallel processes' due to the activities of readers which are considered to represent images of the writers' activities. In other words, many researchers found that the more students read the better their writing performances are. As mentioned by [5], teaching writing through reading is important for building schemata of the students. Moreover, it is also believed that through reading, students have opportunity to well-organized and well-written pieces of writing that help them to improve their language abilities and to build writing schemata.

However, the finding of this study confirms that learning to write in English is not merely from reading the books since the researcher found out that reading did not have any eye-catching impacts on students' writing skill. Thus, it can be argued that video had more noticeable impacts on students' writing skill in this study. Also, it is proved that the key of students' writing improvement might lie on the role of video in the process of pre-writing which helps them to develop their background knowledge, to get new words and ideas, and develop their writing. Therefore, using video in pre-writing can be useful to make students be at ease to write from the beginning step to the following steps. Pre-writing is believed as a crucial step and plays an urgent role for the flow of the next processes in writing. By watching the video, students can select proper words, use correct grammar, generate ideas and develop them into a suitable organizational pattern. As found in a study by [2] about the use of video in writing classroom, the results show that video affects students' vocabulary leading to writing improvement.

Next, it was prominent that multimodal learning – video seems to give a positive contribution in creating a situation for writing classes making them more enjoyable. When students enjoy in learning writing, they may have the chance to improve their writing performance more easily than the way they traditionally do like reading books,

newspaper articles, notes, etc. This can also be in relation to what [8] points out that video creates a situation when the students have big enthusiasm, enjoy in the process of writing, and are motivated to write. In a primary way, this is a further support that multimodal environment allowing instructional material to be presented in more than one sensory mode may lead students to recognize that it is easier to learn and improve their attention rates, thus leading to improved learning performance [11]. In addition to this, in some cases, video can also be as good as an instructor since it presents the materials or demonstrates procedures to assist them in mastery learning of writing. Through video, students can view the contents and mechanical procedures as many as they need to. Accordingly, video is seen as filling the gap between real life and school life particularly in EFL environments where students have relatively limited access to authentic materials. In short, video is considered as a shelter that helps them acquire new knowledge.

4. Conclusions and Suggestions

This research was an attempt to examine the effects of multimodal learning environment on students' writing performance. The results of this study have shown that multimodal learning – in this case, using videos had a great effect on improving students' writing performance. One evident point to be taken into consideration is that the video has induced a joyful learning environment for the students to write compared to other students experiencing traditional learning environment. The result of this study also proved that reading from books, articles, and the like before a writing activity does not always give more efficient results on students' writing performance. Thus, it could be a great idea if the students could do the writing part by taking advantage of the video.

Future research should involve a large sample, with a representation of learning styles, gender, and age groups. This could also involve more different format of multimodal such as L1 subtitled video, L2 subtitled video, and video without subtitle to find the best pedagogical strategy to improve the students' writing performance. Ideally, future research would also involve investigating writing performance in a more natural study conditions to reduce possible testing effects. Thus, students might be more actively involved in processing the learning in the multimodal environment which leads to the improvement of their writing.

References

- [1] S. Ainsworth and N. Van Labeke, (2002). Using a multi-representational design framework to develop and evaluate a dynamic simulation environment, paper presented at the International Workshop on Dynamic Visualizations and Learning, Tübingen, Germany.

- [2] Y. Akbulut, "Effects of multimedia annotations on incidental vocabulary learning and reading comprehension of advanced learners of English as a foreign language," *Instructional Science*, vol. 35, no. 6, pp. 499–517, 2007.
- [3] D. Birch and M. Sankey, "Factors influencing academics development of multimodal distance education courses," *International Journal of Educational Development Using ICT*, vol. 4, no. 1, 2008.
- [4] C. Canning-Wilson, "Practical aspects of using video in the foreign language classroom," *The Internet TESL Journal*, vol. VI, 2000, <http://iteslj.org/Articles/Canning-Video.html>.
- [5] P. D. Escribano, "Teaching writing through reading: A text-centered approach," *IBERICA*, vol. 1, pp. 55–62, 1999.
- [6] C. Fadel, (2008). *Multimodal learning through media: What the research says*. San Jose, CA: Cisco Systems.
- [7] B. Bal-Gezegin, "An Investigation of Using Video vs. Audio for Teaching Vocabulary," *Procedia - Social and Behavioral Sciences*, vol. 143, no. , pp. 450–457, 2014.
- [8] J. Harmer, *The Practice of English language teaching*, Longman, Edinburgh, 2001.
- [9] G. Ilin, O. Kutlu, and A. Kutluay, *An action research: Using video for teaching grammar in an ESP class*. *Procedia-Social and Behavioral Sciences*, Elsevier Ltd, *Procedia-Social and Behavioral Sciences*, 2013.
- [10] L. F. Lin, "EFL learners incidental vocabulary acquisition in the video-based CALL program," *Asian EFL Journal*, vol. 12, pp. 37–49, 2004.
- [11] R. E. Mayer, "Elements of a science of e-learning," *Journal of Educational Computing Research*, vol. 29, no. 3, pp. 297–313, 2003.
- [12] K. A. Mills, "Multiliteracies: Interrogating competing discourses," *Language and Education*, vol. 23, no. 2, pp. 103–116, 2009.
- [13] R. F. Mohammed, *The effectiveness of using subtitled video to teach grammar*, Iowa State University, 2013.
- [14] R. Moreno, *Who learns best with multiple representations? Cognitive theory implications for individual differences in multimedia learning*, U.S. Department of Education: Education Resources Information Center, Education Resources Information Center, 2002.
- [15] N. Mukminatien, (1997). *The differences of students' writing achievements across different course levels*. Unpublished Dissertation. Malang: State University of Malang.
- [16] A. G. Picciano, "Blending with purpose: The multimodal model," *Journal of the Research Centre for Educational Technology*, vol. 5, no. 1, p. 14, 2009.
- [17] J. C. Richards and A. W. Renandya, *Methodology in language teaching*, University Press, Cambridge, 2002.
- [18] C. Richards Jack, *Second language writing*, Cambridge University Press, Cambridge, 2003.

- [19] S. J. Rokni and A. J. Ataei, "The effect of movie subtitles on EFL learners oral performance," *International Journal of English Language*, vol. 1, p. 5, 2014.
- [20] P. Shah and G. E. Freedman, "Visual spatial cognition in electronic learning," *Journal of Education Computing Research*, vol. 29, no. 3, pp. 315-324, 2003.
- [21] U. Widiati and Y. B. Cahyono, "The Teaching of EFL context: The state of the art," *Journal Ilmu Pendidikan*, vol. 13, no. 3, pp. 139-150, 2006.