Technology Integration in Public Speaking Classroom: Is It Effective?

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Abstract. Speaking skill is regarded to be the major skill that must be had by students in learning a new language. Speaking in public is of primary importance. However, in Indonesian context, poor speaking performance especially in public tends to be the common problem found in English classrooms. Nowadays, a significant change has been brought by technology especially in education by revolutionizing it. The integration of recent technologies in traditional classroom which is face to face classroom has made a drastic change especially in the way people teach and learn. The present study employing quasi experimental design tries to investigate the effectiveness of multimedia technology integration in teaching public speaking skills of the second grade students of English Education Department in a University in Kuningan, West Java, Indonesia. Two instruments are used in this study namely test and questionnaires. After analyzing the data quantitatively by using a statistical tool, the study found that multimedia technology is effective in improving students' public speaking skill. Besides, by integrating technology in public speaking course, it motivates the students to learn because the teaching becomes attention-getting and more interesting.

Keywords: Multimedia; Technology; Public Speaking

1.   Introduction

In learning English, the students are encouraged to master the four language skills, namely listening, speaking, reading, and writing skills. Among the four skills, speaking is a priority for many second or foreign language learners. Moreover, speaking in public is of primary importance, meaning that students having good ability in speaking are assessed to have good communicative mastery of a language and vice versa. In fact, language fluency to communicate orally with others is considered as more important than the ability to read and write. The final purpose of English as a foreign language learners and instructors in language teaching and learning is to introduce oneself accurately and adequately or be able to speak fluently while communicating with native or knowledgeable speakers of a second or foreign language [1]. However, in Indonesian context, poor speaking performance especially in public tends to be the common problem found in EFL classrooms. Several efforts are done by the teachers to improve learners' speaking performances [2] various methods have been used by English teachers such as "communicative language teaching, information gap techniques and audio-recorded media strategies", unfortunately, there is still no significant improvement on their speaking performance; the level of their speaking skills is still the same and not satisfactory.   .

There are eight aspects that make speaking difficult, namely clustering (the fluency of speaking), redundancy (using redundancy of language to make meaning clearer), performance variables (how to pause and hesitate while speaking English), colloquial language (language used in daily activity), rate of delivery (acceptable speed of speaking), stress, rhythm, and intonation (stress-timed rhythm and intonation convey important messages), and the last is interaction. Those eight aspects indicate that teaching speaking is not an easy task. Similarly, getting the students to speak English is quite difficult. A study conducted by Wang (2014) [3] reported that there are three factors influencing students' speaking competence namely cognitive, linguistic and affective factors.

As cited in Safari (2016) assessing students' speaking skill is not an easy task, it is the most difficult job for the teachers (Chang, Wu, & Ku, 2005) [4] and public speaking is assessed to be the most feared form of oral communication (Pull, 2012) [5] On the other hand, in educational assessment it is often overlooked. A success in public speaking performance is indicated from multiple modalities — e.g., the content of speech, intonation and voice, facial expressions, body postures, hand gestures and head poses.

Public speaking is a compulsory subject of second grade students in English Education department, University of Kuningan, West Java, Indonesia. Based on observation result, a lot of students taking Public Speaking course are assessed to be shy to express themselves in front of other people. They feel scared to speak English because of limited vocabulary and grammatical mastery. Sometimes, students want to say something but they are hard to say it. As a result, they often stop speaking immediately then they ask their teacher or speak in their first language in the middle of conversation. Students are commonly shy to speak English since they are worried about speaking badly. Therefore, teachers do need particular techniques to teach speaking including thinking of technology integration in teaching speaking such as utilizing web-based language learning environment or providing technology based speaking teaching. An active role should be played by the teachers in providing feedback and monitoring oral development of language learners' in web-based language learning environment [6].

Access to information, the ability to communicate and opportunities to collaborate on a universal scale is provided by technology. A fundamental change in educational pedagogies is required to prepare students to become active and effective contributors in this knowledge-based, connected world. [7]

Many things are offered by the rapid development of technology including a better tool to explore the new teaching method. Multimedia technology has played a very important role in teaching English especially in the non-native speaking of English situations. In English language teaching, there are many choices from the world of technology: TV, CD rooms, computers, CALL, the internet, electronic dictionary, blogs, video, Power Points, audio cassettes, DVDs or VCDs. It is true that these technologies have been successful in replacing traditional teaching method. Technology provides so many choices to make teaching and process more interesting and attention-getting. The situation when teacher and student use of computer technology in constructivist and socio constructivist ways to support the learning of core subject-area content is defined as effective technology integration [8] Consequently, multimedia-based programs in traditional EFL classrooms has been reported to be the impactful teaching medium [9] because it is able to grab students' attention and motivate them to learn, in addition to be able to present authentic situations that the students will not have the opportunity to see in the real life situation.

Technology's role is getting more important and significant not only in our personal life but also in professional lives and the students are using technology more and more. With the increasing of science and technology, computer multimedia has been used widely in every

aspect, especially in English teaching. With the integration of multimedia technology in English language teaching, English is not becoming the monster anymore where English is assessed to be the most difficult subject, and the integration of technology makes English language teaching more effective, efficient and interesting.

Previous researches have been conducted by some experts. The first reported that regarding speaking skills, students in the interactive group outperformed those in the face-to-face group. Besides, online mobile-assisted task-based activities give positive impacts on improving students speaking skills [10]. The second showed that the teacher's perspectives on technology integration ranged from "technology as a tool for teaching" to "technology as a learning activator." Moreover, the teacher's implementation of technology integration is affected by external factors such as poor technology management [11]. Therefore, technology management skill is also needed by the teacher to conduct an effective technology-based English teaching. The last reported that using online videos in classes can be of vital importance and effective in improving EFL learners' speaking ability [12]

With reference to the importance of multimedia technology in English Language Teaching, a few researchers focused on multimedia learning materials. There have been limited studies concerned on the utilization of multimedia technology in improving students' public speaking skill. Therefore, this research intends to investigate the effectiveness of multimedia technology integration in public speaking classroom. The objectives of this research are to find out (1) whether or not multimedia technology is effective in improving students' public speaking skill and (2) students' responses towards the use of multimedia technology in public speaking course.

2.   Literature Review

In this globalization era, technology, especially Information and Communication Technology (ICT) is growing rapidly, which forces the world of education to have positive innovations for the advancement of education. One of functions of technology is to be able to change conventional learning methods into non-conventional ones. In the framework of innovative school, schools must respond to increasingly sophisticated technological developments that provide a myriad of knowledge. Learning in schools needs to use a series of electronic equipment that is able to work more effectively and efficiently. Nevertheless the role of the teacher is still needed in the classroom, as a designer, motivator, and mentor that is vital and urgent in its existence in the teaching and learning process; this does not mean learning without teacher.

Technology related to the teaching and learning process is as an effective and efficient media in the teaching and learning process. As a learning media, technology, especially ICT, is associated with various activities that are used to access, collect, manipulate, and offer or communicate about information. The intended technology includes equipment (such as computers, laptops and other devices), software applications and circuits (for example internet, wifi, local network infrastructure (local networking infrastructure and teleconference). The use of technology as a medium of learning will clearly make the teaching and learning process be effective and efficient because it can make it easier for a teacher to get or convey information (messages or content, material) lessons, can help improve student understanding, present data / information more interesting or reliable, facilitate interpretation of data, and obtain information. It can be said that technology as a medium is an important role as an effective and efficient tool in the teaching and learning process.

Computer-based materials for language teaching often referred to CALL (Computer Assisted Language Learning) appeared in the early 1980s. As access to Information and Communication Technology (ICT) has become more widespread, so CALL has moved beyond the use of computer programs to embrace the use of internet and web-based tools. The term TELL (Technology Enhanced Language Learning) appeared in 1990s, in response to the growing possibilities offered by the internet and communication technology.

Technology integration in English language teaching is highly suggested to facilitate teachers and learners to learn more widely, more vary. Through the facilities provided by the technology system, students can learn independently, anytime and anywhere without being limited by space and time. The material they can learn is also more varied, not only in the form of word presentation, but can be richer with variations in text, visual, audio, film and animation. In short, this technology integration is expected to create meaningful, active, reflective, collaborative, contextual English teaching which can also train students' higher order thinking skills.

The topic of technology has been the interesting issue to be researched by several researchers. First study revealed that multimedia-based instructions in traditional EFL classrooms has been reported to be the impactful teaching medium [9] because it is able to grab students' attention and motivate them to learn, in addition to be able to provide contextual teaching by presenting authentic situations that the students will not have the opportunity to see in the real life situation.

Second study reported using online videos in classes can be of vital importance and effective in improving EFL learners' speaking ability [12]. Third study reported that the students improved their speaking skills thanks to the flipped model, and they had a positive perception about the model [13]. This study provides useful implications of integrating flipped instruction in foreign language teaching.

The present study aims at investigating the effectiveness of multimedia technology integration in public speaking classroom of second grade students in a university in Kuningan, West Java, Indonesia.

3. Research Method

Quasi-experimental with nonequivalent control group design was applied in this research. Nonequivalent control group is a kind of quasi-experimental design in which one or more treatment groups are pretested, administered a treatment, and post-tested .Thus, two classes were selected in which one as a control group and one as an experimental group. The experimental group consisting of 27 students was given a treatment which referred to teaching public speaking by using multimedia technology, while control group consisting of 26 students is taught by applying traditional method such as lecturing in the learning process.

In collecting the data, pre-test, post-test, closed-ended questionnaires with five criteria of *Likert Scale* (strongly agree, agree, undecided, disagree, strongly disagree) consisting of 10 questions were used. Regarding the research procedures, 53 students were chosen to be the participants of this research that were then divided into two groups; experimental and control group. The treatment was conducted in experimental group for six meetings by using multimedia technology namely power points, videos, three mobile assisted applications namely *Google Translate, Oxford Dictionary* and *Hello English*. These multimedia technologies are provided to enhance students' public speaking skill especially in debating and presentation skills

material. In conducting this research, there are several steps done by the researcher; preparing lesson plan, administering pre-test, giving treatment, administering posttest and distributing questionnaires.

The procedure of analyzing the data was done firstly by conducting normality and homogeneity test, then determining the students' score of both groups in the pretest and the posttest by using dependent and independent t-test, and analyzing the questionnaire. Speaking rubric from Brown (2001) was used to assess students' public speaking skills. All data were computed and analyzed by using SPSS 20.0 for windows. The last, interpreting the research finding was done to give clear explanation about the results of the research.

4. Findings and Discussion

4.1 Findings

Is multimedia technology integration effective in public speaking classroom?

The dependent t-test was used to find out the difference mean between pretest and posttest or before and after the treatment in experimental group. The hypotheses of this test are stated as follows:

H_0 : there is no significant difference of mean between pretest and posttest of the experimental group (sig. 2 talied>0.05)

H_a : there is significant difference of mean between pretest and posttest of the experimental group (sig. 2 talied<0.05)

Table 1. *Paired Samples Statistics*

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before	2.34	38	.646	.105
	After	3.17	38	.435	.071

Table 2 *Paired Samples Test*

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Before - After	-.829	.742	.120	-1.073	-.585	-6.884	37	.000

The data in Table 1 shows that students' mean score in experimental group improved after receiving the treatment. It can be seen from the mean score of the experimental students on pretest that was 2.34 before receiving the treatment, while the students' mean score on posttest improved became 3.17 after receiving the treatment (3.17>2.34).

Besides, as it is seen in Table 2, the sig (2-tailed) is 0.000. It was clear that the sig (2-tailed) score was lower than the significance level (0.000<0.05). This result indicates that the null

hypothesis was rejected and the alternative hypothesis was accepted which means that there was significant difference of mean between pretest and posttest in the experimental group. In other words, the use of multimedia technology is effective in improving students' public speaking skills.

Students' students' responses towards the integration of multimedia technology in public speaking classroom

Validity and reliability tests of questionnaire were done to test whether or not the list of questionnaire used in this research is valid and reliable. To test the validity and reliability of the questionnaire, SPSS 20.0 was used. The result of validity test of the questionnaire is shown in table 3.

Table 3 The Result of Validity Test of Questionnaire

No.item	r_{xy}	r_{table}	Validity
1	0.605	0.320	Valid
2	0.679	0.320	Valid
3	0.566	0.320	Valid
4	0.426	0.320	Valid
5	0.567	0.320	Valid
6	0.618	0.320	Valid
7	0.500	0.320	Valid
8	0.437	0.320	Valid
9	0.729	0.320	Valid
10	0.732	0.320	Valid

*r_{table} is taken from the list of r_{table} distribution score with 5% level of significance. Moreover, the result of reliability test of the questionnaire is drawn in Table 4.

Table 4 Reliability Statistics of Questionnaire

Cronbach's Alpha	N of Items
.784	10

Based on table 4, it can be seen that the score of Cronbach's Alpha as score of reliability test of the questionnaire was 0.784. This score was higher than 0.70 (the minimum number of reliability), so it can be concluded that the list of questionnaire was reliable. From the result of validity and reliability test above, it can be concluded that the list of questionnaire used in this research was valid and reliable.

Based on analysis of questionnaires' result, it can be concluded that most students agreed that multimedia technology can help them in learning public speaking easily. It was got from the students' answer where they promoted statements like "I like learning English especially in learning speaking by using multimedia technology," "I feel excited when learning public speaking by using multimedia technology," and "Learning public speaking became fun activity after I use multimedia technology." Unfortunately, there was one student or 2.63% of the students who disagreed to the second statement of the affective factor.

In behavioral aspect, it can be seen that the students endorsed these following statements; "I will follow the learning process if the teacher uses multimedia technology in teaching public speaking skill," "I tried to be active in public speaking course if the lecturer teaches by using

multimedia technology," and "I am confident to speak English in public after learning by using multimedia technology."

Finally, in cognitive aspect, 60.53% of the students promoted the statement "multimedia technology is appropriate to be applied in learning public speaking." 65.79% of them agreed that they learnt effectively when the lecturer provided the material by using multimedia technology. It means that more than half of the samples in experimental group agreed that multimedia technology can help them in improving their public speaking skill.

4.2 Discussion

The result of pretest showed that the mean score of the experimental group was 2.34 and the control group was 2.39. It indicated that both groups' mean were not significantly different or based on the hypothesis that there was no significant difference of means between two groups in pretest. It means that the experimental and control group have the same basic of public speaking skill.

Then, before administering posttest, the students in experimental group received the treatment in which they learnt speaking by using multimedia technology as a media to help them during the learning activity. After receiving the treatment, it was proved that the use of multimedia technology was successful in helping students to improve their public speaking skill. This improvement can be seen in students' mean score on posttest in experimental group that achieved 3.17. It was significantly different from the control group's mean score that was only 2.59. Besides, the t-test result also supported this finding since the asymp.sig was lower than the level of significance (0.000<0.05). It means that the null hypothesis was rejected and the alternative hypothesis was accepted or, in other words, there was significant difference of means of the students' pretest (2.34) and posttest (3.17). So, it can be concluded that multimedia technology is effective in improving students' public speaking skill.

Finally, to explore students' attitude towards the use of multimedia technology in learning speaking, ten items in the form of questionnaire were given to the students in experimental group. Based on the result of questionnaire analysis, most students (47.37% of the students, 39.47% of the students, and 47.37% of the students) agreed to the three statements given in affective aspect. In behavioral aspect, three statements were also endorsed by 39.47% of the students, 39.47% of the students, and 47.37% of the students who agreed to the statements given. Then, for the cognitive aspect, from four statements given, 60.53% of the students, 65.79% of the students, 42.11% of the students, and 47.37% of them agreed to those statements. Therefore, it could be concluded that most students in experimental group agreed that multimedia technology can help them in improving their public speaking skill.

5.   Conclusion

As the result of this research, it can be concluded that multimedia technology is effective in improving students' public speaking skill of second graders in English Education study program. Apart from several obstacles faced by the students in learning public speaking, such as difficulties in finding appropriate vocabulary while stating some ideas, students' difficulties in pronouncing some vocabularies correctly, students' difficulties in applying appropriate grammar, etc., the use of multimedia technology was revealed to be helpful for the students to improve their public speaking skill.

The conclusion was supported by the findings showing that the students were actively involved in classroom activities when the teacher used multimedia technology in teaching public speaking. It was in line with the results of independent t-test on pretest and posttest which showed that the mean scores of experimental and control groups were significantly different.

The last conclusion is that most students in experimental group agreed that multimedia technology can help them in improving their public speaking skill.

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