THE IMPLEMENTATION OF PROJECT-BASED LEARNING (PBL): VIDEO PRODUCTION AS A PROJECT IN TEACHING SPEAKING SKILL

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Abstract: The research is aimed to answer the question how project-based learning using video production is implemented in speaking class. The research also tries to find out whether or not the implementation of project-based learning using video production in speaking class significantly improves students’ speaking skill. Furthermore, the students’ responses to the implementation of project-based learning using video production are also investigated. This research involved two classes. The data were analyzed by using mixed method. The results showed that all of the activities in the classroom met the standard of PBL classroom activities. However, in the learning process, the students found the problems in how to construct the sentence, pronounce the word, and record and edit the video. The teacher become the facilitator to solve their problems. Overall, the students learn how to speak while creating the project. The result of the statistical computation showed that the implementation of project-based learning using video production improved students’ speaking skill by the value of t_{obt}(9.811) which greater than t_{crit} (2.002, α=0.05, df= 58). In conclusion, the null hypothesis was rejected. In addition, the data from questionnaire demonstrated that the students show positive response toward the implementation of project-based learning using video production.

Keywords: implementation, project-based learning, speaking, teaching, video project

INTRODUCTION

Communication is an important skill that should be acquired by people as social creature, because when they communicate with others they can share and gather information. Meanwhile, English as lingua franca has an important role in terms of sharing and gathering information for people who communicate in different languages. However, mastering English speaking skill as foreign language is not an easy matter. There are several aspects that affect this situation such grammatical, lexical and phonological problems (Gan, 2012). If non-native English speakers want to acquire English speaking skill, it is a must for them to understand the pattern and to be able to pronounce each word of the language.
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In addition, the problems in teaching and learning speaking classroom basically based on the teachers’ mistake in arranging the classroom activities and learners’ personality and attitudes to the learning speaking process. Sometimes the teachers believe that teaching speaking skill is as same as teaching the other skills. They too focus to present the material such as topic, language features, and grammar without giving much opportunities to the students to speak.

Based on Ur (1995) statement, the most problematic issues in learning speaking is students’ self-motivation. Motivation in learning speaking is very essential in order to gain the success of acquiring the target language. In line with that, Murcia (1979) believes that the students will learn something if they want to do it and they will not learn anything if they do not want to do it no matter what they are forced to do.

To solve this problem, task-based approach which is promoted by Thornbury (2007) can be used in teaching and learning speaking. He believes that by promoting task-based approach in the classroom, the students can have a lot of opportunity to practice to speak while learning the theory rather than learn the theory about speaking first and practice it later.

Although speaking skill is not easy to be learnt, the implementation of Project-Based Learning (PBL) activity which is combine with Information and communication technology (Video Production) can be an alternative to solve this problem.

The present study will be proposed: to investigate the implementation of project-based learning (PBL) by using video production as a project in teaching speaking skill: to analyze the effect of project-based learning (PBL) by using video production as a project in teaching speaking skill; and To find out students’ responds toward the implementation of project-based learning (PBL) by using video production as a project in teaching speaking skill.

LITERATURE REVIEW

This part offers the linked theories from the experts and their researches in the terms of the implementation of project-based learning: video production as a project in teaching speaking skill, alongside with related literatures which are used in the research.

Project-based Learning

Project-Based Learning (PBL) is a student-driven, teacher-facilitated approach to learning (Bell, 2010). In this occasion, Learners catch knowledge by asking questions that appear based on their natural curiosity. Basically project is an analysis about something. Therefore, in PBL, students are guided to develop research based on their question under the teacher’s supervision. According to Educational Technology Division (2006), PBL learning activities are long-term, interdisciplinary, student-centered, and integrated with real-world issues and practices.

On the other hand, project-based learning as a part of teaching and learning process requires careful instructional design. This situation will lead to the success of engaging an equal passion of learning both students and teachers, developing a wide range of skills that will be needed by the students in college and in the workplace, and motivating students with a wide range of abilities and learning needs (Patton & Robin 2012).

Speaking Competence skill

In general, the purpose of speaking divided into two aspects. It was argued that the purpose of speaking can be either transactional or interactional (Torky, 2013). He also
believes that between transactional purpose and interactional purpose have their own characteristics.

In transactional discourse, the main purpose of speaking is to share information. This purpose only focuses on massage, or how to make a message understandable while people communicate with others. In line with that, Thornbury and Slade (2007) “explain that transactional language is primarily message-oriented” (p. 20). “Additionally, there are two kinds of transactional discourse that should be understood by the speaker, the first is the situation that only focuses on giving and receiving information and the second is the situation that only focuses on obtaining good or service” (Richard 2008, p. 22).

In interactional discourse, the purpose of speaking is to maintain or establish relationship. Social function is the main focus in this discourse. Richards and Rodgers (2001) argue that in interactional discourse language is a tool for the realization of interpersonal relations and for the performance of social transactions between individual. In line with Richard and Rodgers statement, Yule (1989) believes that this discourse plays an important social role in helping one individual to keep their existence in social intercourse. On the other hand, the roles of interactional design are about how to maintain social relationship, to save people position when they interact with others, and to make friendly situation when people communicate with others.

Technology in Language Teaching

“Experts in the arts, sciences, education, and business believe that Inspiration, Imagery, Imagination, Intuition, Insight, incubation, and Improvisation are the keys to gain success in each field” (Piirto, 2011, p.43). Focusing on improvisation in education, in this modern era, the use of technologies in assisting language learning are rapidly growing. Many educators try to apply technology in their teaching and learning process in order to get the better teaching and learning outcomes, to help learners in the process of reaching their learning objectives, to help teacher in managing teaching and learning activities, and to help teacher in assessing students outcome related to the teaching and learning topics. According to Godwin-Jones (2011), the uses of technology with enhanced capabilities have dramatically increased the interest level, including among language educators.

One of many techniques in teaching speaking skill is using technology such as audio and video taping. Here, students can learn how to speak anytime and anywhere because there is no boundaries related to time and place. Related to this study, Mobile phone is used as media in creating the video. There are several mobile devices that usually use as mobile learning includes handheld computers, audio and video player, and cellphones. The handheld computers are portable computer that can be operate by using one hand such as PDA or smartphone. The use of handheld computers can motivate students to produce both quantity and quality of target language (Samules, 2003). An audio and video player includes iPod, MP3 and MP4 has become a part of human life, they bring this device everywhere and anywhere. In education the use of audio and video players can engage students’ interest (Cui & Wang, 2008). Cell phones as Mobile learning are the most popular devices. Prensky (2004) believes that cell phone is not only the tools to communicate, it has computer that can be put in the pocket, and it can be used to learn.

Video Production

Video can be meant as any media that is used to engage the sense of sign and sound (Thibodeaux, 2011). In simply, video can be said as a media consists of audio and visual. In educational field, an affective and relevant use of video will lead the students in their
development of language skills (Syaifullah, 2008). Supporting the statement, Sand (1956) believes that audio visual process can help students to learn faster than by verbal explanation only. The statements lead to an understanding that video is a tool or media that can help students in reaching their learning objective in teaching and learning process.

**Instructional design of video production as a project-based learning activity**

“Instructional design can be meant as systematic and reflective process of translating principles of learning and instruction into plans for instructional materials, activities, information resources, and evaluation” (Smith & Ragan 1993, p.2). Thus, in order to help the students in getting the target learning, teachers should be able to arrange activities that engage students to the teaching and learning activity.

Students’ Response toward the implementation of Project-based Learning (PBL) by using video production as a project in learning speaking skill.

Generally, students’ response in teaching and learning process can affect their learning result. In teaching and learning language process students’ response also become one of many aspects that influence language learning result. Ryan and Giles (1982) confirm that students’ achievement in second language learning are related to students’ attitudinal variables on language learning process.

On the other hand, human response starts from beliefs that they hold in their mind. In this case, belief is an ability to perceive includes senses, feelings, ideas, thoughts, and theories that create the ability to understand the difference (Romanov, 2011). Moreover, Fludd (2009) adds that belief is the process of getting awareness or understanding of sensory information or a process of collecting understanding based on what they think. On the other hand, response itself defines as a well plan and steady behavior of thinking, feeling, and responding to individual, groups, and social issues or, to put in simply to any situation that happened in the environment (Lambert & Lambert 1973). Those definitions lead to one understanding that response is a reaction to the beliefs.

**METHOD**

This current study used a mixed method research design which were consisted of descriptive analysis and statistical analysis from test, questionnaire, and observation. According to Malik and Hamied (2014, p. 268), the mix method approach is the combination of qualitative and quantitative research design in order to have deeper information of the phenomenon under investigation.

The population in this research was first grade students in one of private vocational school in Bandung. The sample use two classes, experiment and control class; each class consists of 30 students. There are no differences between the experimental and control class in terms of assessing their speaking ability. In this case, short presentation was used to assess students’ speaking ability. So, the fix number of the sample were 60 students.

In this study, there were three instruments in collecting data which consist of: test, questionnaire, and observation. The study randomly chose two classes, experiment and control class and each class consisted of 30 students. This study was conducted in May 2017 until June 2017 because this study followed the school regulation.

The analysis of data was conducted by using mix method after assembling the required data such as pre-test, post-test, questionnaires, interview and observation.
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FINDINGS AND DISCUSSIONS

This chapter has presented and discussed the findings of the study. This is generally composed of presentation of the implementation of Project-based learning using video production as a project in teaching speaking skill, the presentation of students’ pretest and posttest scores, and the discussion of students’ response toward the implementation of Project-based learning using video production as a project in teaching speaking skill.

Classroom Activities in the Implementation of Project-based Learning (PBL) by Using Video Production as a Project in Teaching Speaking Skill

The points in this rubric tried to observe how the teacher took a part in the implementation of video production as a project in teaching speaking. The table below shows the observation result.

Table 1. Teacher’s role

<table>
<thead>
<tr>
<th>Standards-focused PBL Classroom</th>
<th>Below Standard</th>
<th>✓*</th>
<th>Meets Standard</th>
<th>✓*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher remains rooted to one location in room.</td>
<td>Teacher moves about classroom, working with groups and individuals.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher routinely talks majority of class period.</td>
<td>Teacher listens to students as much as he/she talks.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher frequently polices student behavior.</td>
<td>Teacher safely relies on students to monitor their own behavior.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher does not safely rely on students to take responsibility for coming to class prepared.</td>
<td>Teacher safely relies on students to take responsibility for coming to class prepared.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher employs one style of instruction.</td>
<td>Teacher responds to students’ needs and goals and changing social conditions by modifying timing, content and style of instruction.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher does not model behaviors that build relationships that will support learning and assessment</td>
<td>Teacher models appropriate behaviors to build relationships that support learning and assessment</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher focuses on providing answers.</td>
<td>Teacher asks more questions than provides answers.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The data confirmed that in this study the teacher moves about classroom, working with groups and individuals, teacher listens to students as much as he/she talks, teacher safely relies on students to monitor their own behavior, teacher responds to students’ needs and goals and changing social conditions by modifying timing, content and style of instruction, teacher models appropriate behaviors to build relationships that support learning and assessment, teacher asks more questions than provides answers. Blumenfeld, Soloway, Marx, Krajcik, Guzdial, and Palincsar (1991) are agree with those roles, they state that in project-based learning, classroom management should be changed by the teachers and they also must have a big collection of resources and knowledge. All
of the teachers’ role should be done in order to create positive result in implementing project-based learning in the classroom.

**Table 2. Students’ role**

<table>
<thead>
<tr>
<th>Standards-Focused PBL Classroom</th>
<th>Below Standard</th>
<th>✓*</th>
<th>Meets Standard</th>
<th>✓*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student Role</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students are not involved in creating and maintaining classroom norms.</td>
<td>Students help create and maintain appropriate norms for behavior and learning.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students do not work effectively in groups. Contracts are weak or not evident</td>
<td>Students work effectively in groups. Student groups operate under the guidelines of a contract written by the group.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students do not connect learning with real-world applications.</td>
<td>Students connect learning with real-world applications.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students do not extend learning.</td>
<td>Students extend learning beyond requirements of task.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The data confirmed that the implementation of video production as a project in teaching speaking in this study forced the students to create and maintain appropriate norms for behavior and learning and work effectively in groups. Student groups operate under the guidelines of a contract written by the group. The activities is support by Brooks and Brooks (1993) who said that Project-Based Learning (PBL) is designed to support more engaged learning and constructivist-based instructional approach is used in PBL learning activity.

Moreover, the implementation of video production as a project in teaching speaking also forced the students to connect learning with real-world applications. According to Educational Technology Division (2006), PBL learning activities are long-term, interdisciplinary, student-centered, and integrated with real-world issues and practices. This students’ activities can help them in understanding and acquiring the learning materials, because by connecting the learning activities into real-life application the students will have large opportunities in learning the topic. On the other hand, when the implementation of PBL can be optimized by the teachers, it will makes the students can surpassed beyond the teachers’ expectation (Johnson, Smith, Smythe & Varon, 2008). In line with that, the data also shows that the implementation of project based learning in this study made the made the students learn beyond requirements of task.

**Table 3. Dialogue and discussion**

<table>
<thead>
<tr>
<th>Standards-Focused PBL Classroom</th>
<th>Below Standard</th>
<th>✓*</th>
<th>Meets Standard</th>
<th>✓*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students do not deliver meaningful information/skills to each other.</strong></td>
<td>Students deliver meaningful information/skills to each other.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Student Role</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students do not respond to each other.</td>
<td>Students respond to each other in elaborated communication and feedback</td>
</tr>
<tr>
<td>Students do not adhere to polite norms of spoken communication.</td>
<td>Students adhere to polite norms of spoken communication.</td>
</tr>
<tr>
<td>Teacher does not provide opportunities for students to learn from each other.</td>
<td>Teacher provides multiple opportunities for students to learn from each other (peer teaching and communication).</td>
</tr>
<tr>
<td>Teacher dominates discussion.</td>
<td>Teacher facilitates, not dominates, discussion.</td>
</tr>
</tbody>
</table>

The data explained that in implementing the video production project the students deliver meaningful information/skills to each other, respond to each other in elaborated communication and feedback; and adhere to polite norms of spoken communication. The project-based learning that implemented in this study help the students to learn autonomously. In line with that, Project-Based Learning (PBL) is designed to support more engaged learning and constructivist-based instructional approach is used in PBL learning activity (Brooks & Brooks, 1993).

In addition, the data confirmed that video production project provided multiple opportunities for students to learn from each other (peer teaching and communication) and teacher facilitates, not dominates, discussion. The results supported by Bell (2010) who says that Project-Based Learning (PBL) is a student-driven, teacher-facilitated approach to learning.

The Effect of Project-based Learning (PBL) by Using Video Production as a Project in Elevating Students’ Speaking Skill

The computation of pretest scores both in control and experiment classes show that the data distributions in both of classes were normal. Besides that, the computation shows that the variance of experiment and control classes were equal. Because of the distribution of the data were normal and the variance were equal, t-test computation was used. The result showed that the $t_{obt}$ is lower than $t_{crit}$ ($0.313 < 2.002$) so the null hypothesis is not rejected. It means that the two samples are from the same population and there is no significant difference between the two groups. It can be concluded that experiment and control students’ basic ability are not different.

The computation of posttest scores both in control and experiment classes show that the data distributions in both of classes were normal. Besides that, the computation shows that the variance of experiment and control classes were equal. Because of the distribution of the data were normal and the variance were equal, t-test computation was used. The result showed that the $t_{obt}$ is bigger than $t_{crit}$ ($9.811 > 2.002$) so the null hypothesis is rejected. It means that the two samples are from the same population and there is significant difference between the two groups. It can be concluded that experiment and control students’ ability are significantly different after treatment.

After that the computation of the pretest and posttest both in control and experiment classes were administered using paired sample test. The computation scores show that there was a difference between the pretest and posttest in the control and experiment classes. However, the result shows that the students in experimental class reach higher scores $t_{obt}$ 22.052 than students in control class in posttest $t_{obt}$ 9.811. The results show that
the conventional method is effective in teaching speaking but the implementation of Project-based learning using video production as a project is better than conventional method in improving students' speaking skill.

The Students’ Response toward the Implementation of Project-based learning (PBL) by Using Video Production as a Project in Teaching Speaking Skill

The first aspect of students’ responses is the cognitive aspect. The aim of investigation is to discover the experiment group’s belief on choosing video production as an appropriate learning activity to learn speaking for X grade students in vocational school.

Chart 1. Cognitive aspect of students' attitude

From the data above, it clearly explains that the students show positive response toward the implementation of video production as a project in learning speaking skill. They disagree if the learning speaking skill class used conventional class activity. They believed that video production as a project is appropriate in teaching speaking skill.

The second aspect of students’ responses is the affective aspect. The aim of investigation is to discover the experiment group’s belief whether video production activity is safe for learning speaking skill, whether they think that practicing speaking by producing the video can help them to improve their speaking skill, and whether they feel interested in speaking activities when producing the video.

Chart 2. Affective aspect of students’ attitude
Based on the explanation above, the data from the affective aspect show that the students produced a positive response. The result shows that the implementation of video production project is an activity for learning and it is useful treatment for learning English language, particularly speaking skill. Most students felt that the implementation of video production as a project enhanced their motivation to learn speaking skill.

The third aspect were analyzed from the four items of the questionnaire which are focused on students’ response toward the implementation of Project-based learning using video production as a project in teaching speaking skill. Each of the statements was planned to discover the students’ motivation toward the implementation of video production as a project in teaching speaking skill.

Chart 3. Behavioral aspect of students’ attitude

The data from behavioral aspect presented that the students responded positively toward the implementation of video production as a project in learning speaking.

CONCLUSION

This chapter has presented and discussed the findings of the study. This is generally composed of presentation of the implementation of Project-based learning using video production as a project in teaching speaking skill, the presentation of students’ pretest and posttest scores, and the discussion of students’ response toward the implementation of Project-based learning using video production as a project in teaching speaking skill.

There were seven meetings of implementing video production as a project in teaching speaking skill sessions consisted of: 1. Pretest, 2. Setting the stage for the student with real-life samples and students take on the role of project designers, 3. Discussing and accumulate the background information and negotiating the criteria for evaluation, 4. Accumulating the necessary materials 5. Preparing to present the project, 6. Presenting the project, reflecting on the process and evaluating the process; and 7. Posttest. All of the sessions were observed using observation rubric (adapted from West Virginia Department of Education) which were focused on PBL classroom activities, includes: Teacher role, students’ role, dialogue and discussion, and instruction and learning.

The data from statistical computation also showed that video production as a project gave a significant impact in improving students’ speaking skill. The result of the t-test computation (independent sample test) exhibited a significant difference between the experimental group who was treated by implementing the video production project and the control group who was treated using conventional classroom activities in which the $t_{obt}$ is bigger than $t_{crit}$ ($9.811 > 2.045$) so the null hypothesis is rejected so the null hypothesis was rejected.
The result from the questionnaire data also showed that the implementation of Project-based learning using video production as a project in teaching speaking lifted the students’ interest and motivation in learning and it can be said that the implementation of video production as a project in teaching speaking skill is effective in improving their speaking skill. The students’ positive response toward the implementation of video production as a project in teaching speaking was one of the factors to their significant increase on their speaking test. As indicated by the result of the students’ test, the increase of the students score of experiment group is 46.84 (pretest mean=35.33 and posttest mean=82.17). From the t-test, it can be said that the students’ improvement is significant.

Based on the results, it can be stated that all of the research questions formulated in this study have been answered. The detail discussion on the limitation of the research and the recommendation were presented in last chapter (chapter five). After drawing some conclusions, there are several suggestions that may be useful for teachers and other researchers. First, for researchers in similar field of study, it is suggested to investigate other language skills, such as reading, writing and listening. Further, studying other level of students by implementing video production as a project in teaching speaking skill is required, such as junior high school and elementary school students. The purpose of studying other level is to gain information toward the implementation of video production as a project in teaching various skills in various levels. The last, it is recommended that a further study involve a large number of participants to gain more accurate data.

There were some limitations when this study was conducted such as limited time available for training the students about implementation of project-based learning using video production as a project in teaching speaking skill caused some minor problems during the treatment, for example: preparing the materials and editing the video.

REFERENCES

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