How Far Can I Go?: Video Project-Based Learning As A Meaning-Making Process To Promote Students’ Speaking Proficiency

1Teguh Sulistyo, *1Rizky Lutviana
1Universitas PGRI Kanjuruhan Malang, Indonesia

*Correspondence:
lutviana.rizky@unikama.ac.id

Submission History:
Submitted: July 28, 2023
Revised: September 13, 2023
Accepted: September 14, 2023

This article is licensed under a Creative Commons Attribution-Share Alike 4.0 International License.

Abstract

Effective learning activities in the classroom that motivate students toward language proficiency should be thoughtfully implemented. One notable method is task-technology fit (TTF), which combines task-based language learning (TBLL) and project-based learning (PjBL). This study explores this intersection through video project-based learning (VPBL). It seeks to understand how VPBL interventions influence students’ speaking proficiency, especially in areas of complexity, accuracy, and fluency, while also examining the role of students’ self-efficacy and self-reflection. Utilizing a pre-experimental design without a control group, this research was conducted among second-year students of the English Education Program at Universitas PGRI Kanjuruhan Malang in their Speaking course. 37 students participated in a speaking test prompt and answered self-reflection and self-efficacy questionnaires, while 8 students underwent a more detailed interview regarding their VPBL experience. Results showed a general enhancement in speaking proficiency, primarily due to VPBL’s unique structure and the student’s capacity for self-reflection. Although improvements in fluency and accuracy were noted, there was not significant progress in complexity, indicating that while students utilized VPBL for refining their speaking skills, further efforts are required to advance their linguistic intricacy.

Keywords: Video project-based learning, self-efficacy, self-reflection, speaking proficiency

INTRODUCTION

Drawing from the principles of Second Language Acquisition (SLA), effective language learning is rooted in conscious and deliberate efforts (Krashen, 2013). Furthermore, the significance of genuine verbal interactions in SLA is undeniable (Kozhevnikova, 2019). With this in mind, cultivating classroom activities that are both captivating and aimed at enhancing speaking proficiency becomes crucial. Asakereh and Dehghannejhad (2015) suggest that when students find satisfaction in speaking activities, it can profoundly magnify their oral communication capabilities. By integrating engaging
activities with a fulfilling learning environment, students are more likely to actively immerse themselves in speaking classes, thanks in large part to their innate self-efficacy and introspection in their language learning progression (Fatemi, 2013; Khongput, 2020; Raoofi et al., 2016). However, it is essential to recognize that some students may not fully grasp the importance of these foundational elements in English courses.

Self-efficacy and self-reflection have been shown to contribute to English learning success in the field of language learning. (Hashim & Mohd Yusoff, 2021; Khongput, 2020; Orakci, 2021; Puspita et al., 2014). Thus, students need to apply self-efficacy and self-reflection in the teaching and learning process. Self-efficacy is the level of student confidence in carrying out language learning tasks (Genç, 2016), which greatly influences improving their language skills (Challob et al., 2016). Self-reflection is the ability of students to self-assess regarding the process of how and what they perform in a specific task (Asakereh & Dehghannezhad, 2015; Kilpatrick, 2018; Zarei & Gilanian, 2015), which plays an important role in the success of English language learning (Dishon et al., 2017).

The integration of these concepts in interactive and contextual speech training is essential. A promising learning model that aims to enhance self-efficacy and self-reflection for bettering students’ speaking abilities is the task technology fit (TTF). This model amalgamates the strengths of video project-based learning (VPBL) with the project-based learning (PjBL) approach. PjBL emphasizes mastering English through authentic activities and assignments that foster language proficiency (Douglas & Kim, 2015; Prasetiyo et al., 2023). Sirisrimangkorn (2021) notes that PjBL prompts students to utilize their target language through verbal communication in a learning task. Hashemi et al. (2012) and Jaiswal et al. (2021) further highlight the importance of educators thoughtfully selecting the format and nature of English learning activities within the PjBL framework. Additionally, video-based learning serves as a potent tool to enhance speaking skills (Riswandi, 2016; Yükselir & Kömür, 2017).

Domalewska (2014) argues that the learning trend of utilizing technology has developed rapidly since computer-assisted language learning (CALL) was introduced in the learning process. Of course, technology must be chosen and used wisely in the classroom. One of the technologies that can help students is video because it can help students improve their oral communication skills (Yükselir & Kömür, 2017), and videos made by students themselves can help students understand their strengths and weaknesses. In addition, Prasetiyo et al. (2023) emphasized that PjBL can be combined into a TTF in learning because they complement each other. In short, TTF refers to the extent to which technology plays a role in helping students complete an English learning assignment. Therefore, TTF is considered able to answer research gaps (Bere, 2018; Hashemi et al., 2012; Tiara et al., 2023), which seek types of activities that can support and complement each other in learning English.

Studies by Davis et al. (2018) and Sari et al. (2020) found that VPBL enabled students to discern their weaknesses and strengths in oral communication during public speaking courses. Riswandi (2016) identified video as a valuable tool for enhancing students’ oral communication skills, and research by Yükselir and Kömür (2017) affirmed that viewing videos bolsters these skills. Consequently, integrating video with task-based language learning (TBLL) in speaking instruction is logical. Nonetheless, for video production,
students need significant self-efficacy to display their optimal oral communication skills. Self-efficacy refers to students' confidence in language learning tasks (Genç, 2016). Studies by Yang and Ersanl (2015) and Raoofi et al. (2016) both highlight the correlation between self-efficacy and improved student abilities, suggesting that the greater the self-efficacy, the better the learning outcomes. In essence, motivating students to elevate their self-efficacy is pivotal for English assignments.

Recent research underscores the efficacy of PjBL and VPBL in language learning. Edwards (2022) demonstrated that students perceive video-based feedback as a boon to online learning, while Shaaban (2022) found that self-recorded videos enhance teaching methods related to English skills. Further, Amador et al. (2020) validated the advantages of videos in language learning. Moreover, PjBL fosters positive learning experiences and encourages students to use technology safely and responsibly (Asfihana et al., 2022; Prasetiyo et al., 2023; Widiastuti et al., 2022). Given this body of evidence, it is clear that teachers often implement PjBL, specifically VPBL, in English classrooms, focusing on its impact on students' oral proficiency. However, the intersections of VPBL in speaking classes concerning students' self-efficacy and self-reflection remain uncharted. This study thus seeks to delve into how VPBL might influence students' oral productions, considering the roles of self-efficacy and self-reflection.

METHOD

In this research, a pre-experimental design was employed, focusing on second-year students of the English Education Program at Universitas PGRI Kanjuruhan Malang enrolled in the Speaking course. This study required both quantitative and qualitative data. The qualitative data consisted of oral test scores, self-efficacy metrics (adapted from Schwarzer & Jerusalem, 1995), and self-reflection measures (sourced from Setiyadi, 2016). Qualitative data encompassed student perceptions regarding VPBL implementation and feedback from expert panels, including their comments, criticisms, suggestions, and reactions to the selected recorded videos and Task-Based Language Learning, all aimed at refining this TTF-based learning approach. Instruments such as the speaking test prompt and self-reflection and self-efficacy questionnaires were administered to 37 students (Class A: 20 students; Class B: 17 students). Additionally, in-depth interviews were conducted with 8 students to gather insights into the VPBL learning model's application. For these interviews, each class was represented by 4 students: 2 high achievers, 1 average achiever, and 1 low achiever. The research tools and intervention strategies were validated by two expert panels, one specializing in language testing and the other in research and teaching methodologies.
Figure 1 illustrates the three-phase progression of this research, spanning 10 sessions, with each session lasting 150 minutes. The initial phase involved administering the pre-test. During the second phase, interventions of video project-based learning were implemented. The final phase centered on the post-test administration. To ensure objectivity, two raters evaluated the speaking test using an analytical scoring rubric. Their scores were averaged by summing them and dividing them by two. The consistency between the raters (inter-rater reliability) was assessed using the Pearson product-moment correlation. A paired sample t-test was employed to determine the significant impact of the intervention on students’ oral outputs, considering there were two sets of mean scores: pre-test and post-test. Moreover, Cohen’s d-effect size was calculated to gauge the magnitude of the intervention’s effect.

**FINDING AND DISCUSSION**

Before testing the effects of the interventions, the scores taken by the two raters were tested for inter-rater reliability. Table 1 shows the correlation between the two scores obtained in the post-test session.

**Table 1. Inter-Rater Reliability of the Two Scores**

<table>
<thead>
<tr>
<th></th>
<th>rater1</th>
<th>rater2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>rater1</td>
<td>N</td>
<td>37</td>
</tr>
<tr>
<td>rater2</td>
<td>Pearson Correlation</td>
<td>.557</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>37</td>
</tr>
</tbody>
</table>
Table 1 shows that the significance level was significantly reliable at .557 (medium degree of correlation), so the two scores taken from Rater 1 and Rater 2 met the requirement for inter-rater reliability.

In order to investigate the effects of video project-based learning on students' oral productions, two statistical calculations, namely paired sample t-test and Cohen’s d effect size, were carried out. In this study, oral productions were judged on three components: complexity (30%), accuracy (20%), and fluency (50%) (CAF). Language proficiency is multi-component, so many SLA researchers and L2 practitioners apply the concepts of CAF in measuring students’ L2 proficiency (Tsupa, 2021). Table 2 highlights the results of the pretest and posttest scores on the students’ overall oral productions.

<table>
<thead>
<tr>
<th>Pretest mean</th>
<th>Pretest SD</th>
<th>Posttest mean</th>
<th>Posttest SD</th>
<th>t-stat</th>
<th>ρ-value</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>74.7703</td>
<td>5.06567</td>
<td>78.5405</td>
<td>4.10179</td>
<td>-6.912</td>
<td>.000</td>
<td>1.161</td>
</tr>
</tbody>
</table>

N=37, highest score= 88.0, ρ=<0.05

After being treated with VPBL, there was a significant increase in the students' oral productions, as shown in Table 2, since the ρ value obtained was 0.000 (p<0.05). In addition, the result of Cohen’s d effect size was 1.161, and it was categorized as a large effect (>0.8). In brief, the statistical calculations show that VPBL has a large effect on students’ speaking proficiency.

In general, the students made an improvement in their speaking proficiency as indicated by their performance in their oral production tasks. This improvement was strongly influenced by the nature of the VPBL and their willingness and ability to do self-reflection. VPBL seems to activate students to see and analyze their own oral productions regarding strengths and weaknesses. Thus, they were aware of the efforts they had to make when producing the following oral production tasks. This finding is similar to that of Anas' (2019) study, which showed that a video project is one of the many meaning-making processes that can promote students' active learning. However, the present study did not focus on video making but on the role of videos in oral productions. Ghilay (2018) claims that the VBL (Video-Based Learning) model aims to provide a solution to problems in all higher education institutions around the world and that video is a better tool than memory for self-reflection and they engage classes with technologies (Davis & Oh, 2021; Loftus & Lowney, 2020).

The improvement in students' oral productions was influenced by the strengths of VPBL, where students were able to observe their own oral presentations through self-reflection. Figure 1 shows how students maximized their own video to evaluate their mistakes and use the evaluation to improve their oral performance. There were 14 students (38%) who chose always or almost always, 10 students (27%) who chose usually, 11 students (30%) who chose somewhat true, 2 students (5%) who chose usually not true, and no student chose never. This means that the students noticed that their videos helped them increase their speaking proficiency. The findings are in line with Topdjian and Zipp (2016)
and Speed et al. (2018), who found that watching student-made videos enhanced students' critical thinking skills and their ability to identify and prevent errors, which in turn led to an improvement in their language skills as indicated in Figure 2.

The activities to watch their own performances, according to Respondents 2 and 3, made them aware of their speaking proficiency and motivated them to work harder as they claimed that:

“Observing my own performance helps me understand my speaking quality to answer my own question - “How far can I go?” (R2), and it motivates me to work harder since I am sure I have made progress (R3).”

However, some respondents tend to observe their weaknesses, as shown in the video by saying that:

“I noticed my weaknesses, especially in pronunciation, grammar (R1, R4), and vocabulary (R7), but it motivates me to keep learning, even though I was nervous at times when I was making a video (R6).”

What they believed was supported by some studies, such as Mete (2020) and Speed et al. (2018), who found that videos were powerful tools to cultivate students' self-confidence and to trigger their affective and cognitive dimensions of critical skills. This implies that students need to be aware of the importance of self-efficacy, self-reflection, and motivation in language learning. This finding is also in harmony with Mahardika et al. (2021), who revealed that videos improved students’ confidence in oral productions and motivation because videos were feasible, enjoyable, and affordable for English language learning.

In addition to the analysis of the overall speaking proficiency, the findings also showed that among the three aspects of the speaking proficiency, the interventions affected students' speaking fluency and accuracy, but not complexity (see Table 3). Table 3 indicates that the $\rho$ value obtained was .310, which was higher than 0.05. This result proved that there was no statistical effect of VPBL on students' speaking complexity. In contrast, the results of
statistical computation indicated that VPBL significantly affected students’ speaking fluency and accuracy.

Table 3. The Results of Pretest and Posttest of Elements of Speaking Proficiency

<table>
<thead>
<tr>
<th>Component</th>
<th>Pretest mean</th>
<th>Pretest SD</th>
<th>Posttest mean</th>
<th>Posttest SD</th>
<th>t-stat</th>
<th>ρ-value</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complexity</td>
<td>20.3243</td>
<td>2.59865</td>
<td>20.4865</td>
<td>2.29579</td>
<td>-1.030</td>
<td>.310</td>
<td>-</td>
</tr>
<tr>
<td>Accuracy</td>
<td>14.9865</td>
<td>1.53879</td>
<td>15.8108</td>
<td>1.40115</td>
<td>-5.007</td>
<td>.000</td>
<td>1.2156</td>
</tr>
<tr>
<td>Fluency</td>
<td>39.4595</td>
<td>3.23689</td>
<td>42.2432</td>
<td>1.99869</td>
<td>-6.397</td>
<td>.000</td>
<td>0.7066</td>
</tr>
</tbody>
</table>

N=37, ρ =>0.05

Table 3 illustrates that a significant increase in students’ accuracy was revealed as indicated by the difference between pretest scores (M = 39.4595) and posttest scores (M = 15.9108) where the ρ-value is .000 (>0.05) and Cohen’s d effect equals to 1.2156 (large effect). Also, Table 3 shows that there was a statistically significant difference in students’ speaking fluency. A significant increase was seen from the different scores taken from the pretest and posttest. In the pretest, the students’ mean scores were 39.4595 and those of the posttest were 42.2434. The ρ-value obtained is .000 and Cohen’s d effect is 0.7066 (medium effect).

The findings are in agreement with Spring (2020), who found that video project-based learning could enhance students’ speaking proficiency in terms of fluency and accuracy but did not make gains in complexity, especially lexical work. A study conducted by Révézé and Sun (2021) also revealed that tasks on oral productions promoted students’ linguistic fluency and accuracy but not complexity. It seems that students needed more time and courage to improve their linguistic complexity. Tsupa (2021) states that complexity may be less susceptible to change even as task complexity increases, and complexity is multidimensional (Luo, 2022). Spring (2020) argues that the use of complexity may not have been seen as particularly important or helpful to the students in the class, which may be one of the reasons why less improvement was seen in this area. Thus, it made sense that students focused more on fluency and accuracy than on complexity.

Some research, however, confirmed that student-made videos were valuable in increasing students’ complexity, accuracy, and fluency (Gray & Smithers, 2019; Tsupa, 2021; Xu, 2021). The significant improvement in speaking accuracy could be related to the students’ progress in reducing grammatical errors and speaking with better pronunciation as a result of their activities in evaluating their previous oral performance. Gray and Smithers (2019) suggest that teachers allow learners more time to develop confidence as they work to improve L2 accuracy. Therefore, more reflection is needed on the fundamental beliefs of teachers and learners about teaching and learning (Xu, 2021). Spring (2020) also found that students showed an improvement in their ability to self-monitor their speech and an increase in their semantic accuracy. It seems that students were able to monitor and analyze their speaking accuracy after watching their own performances in the video recording.

The data reported in this study suggests that students’ fluency scores improved when they made an effort to speak more actively during posttests after reflecting on previous speaking tasks. The rise in fluency scores hints that students have enhanced their capability
to monitor their own language performance, indicating an improvement in overall speaking proficiency due to the fact that they were able to speak more fluently with fewer pauses. This finding is in harmony with Spring (2020), who found that students produced utterances more fluently because they reduced some pauses, not as a result of faster pronunciation of syllables. Epstein et al. (2020) claimed that self-assessment of student-made videos was beneficial for students to understand their oral performance so that they could speak more fluently and build their confidence in oral production.

When asked whether students increased their self-efficacy after analyzing their performance, especially in terms of fluency, most of them agreed that self-reflection developed their confidence. Respondents 3, 5, and 8 commented on this:

“I became more fluent in speaking (R3). I was so nervous when I analyzed my first video. But then I could speak more fluently because my teachers supported me to be better. And I know that my fluency got better after comparing Video 1 and Video 2 (R5). I am sure I can speak better after watching my previous speaking performances because I know my strengths and weaknesses and how to deal with them (R8)”.

It seems that watching their own performances in the videos built their sense of confidence and motivation when delivering their speaking tasks. It was probably due to the fact that, according to them, they made good progress in oral productions. This supports the findings of Yang and Ersanl (2015), who stated that self-efficacy and motivation are beneficial in enhancing students’ English proficiency. In addition, Raoofi et al. (2016) found that self-efficacy is essential in language learning, and self-reflection allows students to understand their own performances better (Chang, 2019; Khongput, 2020). Thus, VPBL allows students to develop their speaking proficiency by allowing them to self-monitor their own performance, which in turn increases their self-efficacy and motivation in speaking activities.

CONCLUSION

The use of video project-based learning (VPBL) enabled students to self-evaluate their speaking skills, thereby enhancing both their self-efficacy and motivation for language acquisition. The data reflected an uplift in speaking proficiency, particularly in the domains of fluency and accuracy, though there was less progress in complexity. Additionally, through VPBL, students were prompted to critically dissect their oral performance, steering them toward becoming more autonomous learners. VPBL can also help students develop their self-efficacy and motivation in speaking activities, as they can see their own progress over time and receive feedback from their peers and teachers. To use VPBL effectively, teachers should provide clear instructions and expectations for students’ video projects. They should also allow students to practice their speaking skills before they record their videos. Additionally, teachers should encourage students to self-assess their own videos and provide feedback to each other.

This suggests educators ought to design classroom activities that bolster student reflection, providing them with adequate time and reinforcement to hone facets of speaking, including accuracy, fluency, and complexity. While VPBL showcases several merits, its linguistic contributions in EFL-speaking environments remain inconclusive. As such, continued research might explore the influence of diverse video project themes on L2
speaking capabilities. Furthermore, comparing the outcomes of VPBL in conjunction with dialogic pedagogy versus its standalone implementation in speaking courses would be insightful.

ACKNOWLEDGMENTS
The authors of this article express to acknowledge the financial support from the Indonesian Ministry of Education, Culture, Research, and Technology through Penelitian Fundamental – Reguler grant in 2023.

REFERENCES
Domalewska, D. (2014). Technology-supported classroom for collaborative learning: Blogging in the foreign language classroom Dorota Domalewska Rangsit University,


