CREATING TO COMMUNICATE: HOW PROJECT-BASED LEARNING THROUGH VLOG CREATION ENHANCES GRAMMAR LEARNING IN EFL UNIVERSITY CLASSROOMS

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Abstract

While grammar remains a central component of language learning, persistent challenges remain in enabling learners to apply grammatical knowledge in authentic communicative contexts. Traditional grammar instruction, which relies heavily on textbooks and drill-based exercises, often results in inert knowledge that is difficult to apply spontaneously in real-world communicative context. This study investigates how Project-Based Learning (PBL) through vlog creation enhances the development and application of grammatical knowledge among EFL university students. A mixed-methods design was employed with eleven groups of English-major students (n = 79). These students enrolled in an English grammar course and completed a group-based vlog project as part of the course assessment. Quantitative data were collected through grammar pretests, posttests, and questionnaires. The data were analyzed using descriptive statistics and paired-samples t-test. Students' vlog performances were evaluated with inter-rater reliability using a five-level rubric-based framework. In addition, qualitative data from reflective reports were analyzed thematically to capture learners' experiences in the vlog project. The findings were as follows:

(1) Students demonstrated a statistically significant improvement in grammatical knowledge from pretest to posttest, with posttest mean scores significantly higher than pretest mean scores, $t(78) = -11.92$, $p < .001$.

(2) Students' ability to use grammar in communication was evident in the strongest development in the meaning and use dimensions of their vlogs, as further supported by qualitative data from reflective reports.

The results suggest that vlog-based PBL provides an effective pedagogical approach for integrating grammar instruction with communicative language use in English language teaching. The study also offers practical implications for ELT educators to develop more effective teaching practices that promote greater learner engagement.

Keywords: English grammatical knowledge, English grammatical use, project-based learning, Three- dimensional grammar framework, vlogs

Introduction

English Language Teaching (ELT) in the twenty-first century has increasingly shifted to respond to learners' needs and the demands of a rapidly changing world. This shift reflects a gradual move away from traditional teacher-centered instruction toward more learner-centered approaches that emphasize communicative competence through meaningful and real-life tasks (Merrill, 2013). A similar transformation can be observed in grammar instruction, which has evolved from rule memorization and repetitive drills (Bikowski, 2018) to more communicative and meaning-focused approaches (Nassaji & Fotos, 2011). Despite these developments, previous studies indicate that traditional grammar teaching methods such as grammar translation and textbook-based instruction may not sufficiently support learners in applying grammatical knowledge in authentic communication (Williams, 2003). This often results in inert knowledge (Larsen-Freeman, 2003), which refers to explicit grammatical knowledge that learners are unable to apply spontaneously in real communication.

Although various learner-centered strategies have been proposed to address this issue (Pawlak, 2021), there remains a need for further research into approaches that can bridge the gap between grammatical knowledge and actual language use in meaningful contexts. Accordingly, Pawlak (2021) emphasizes the importance of varied, learner-centered strategies that support learner autonomy and foster effective grammar learning. One such approach is Project-Based Learning (PBL), which enables students to connect classroom knowledge with real-world situations by applying English in meaningful, diverse, and relevant contexts. Project-Based Learning (PBL) provides an appropriate pedagogical framework for integrating vlog creation into English language instruction. Although previous studies have demonstrated the benefits of vlog-based learning in promoting communication skills, limited research has examined its effectiveness in developing grammatical knowledge and its use, particularly among Thai EFL university students. In response to the need for further research on innovative approaches to grammar instruction, this study explores two areas: Project-Based Learning (PBL) and vlog-based learning. The study is expected to provide valuable insights into the potential benefits of vlog-based PBL in ELT. Of particular relevance is the teaching of grammar, which is often a challenge for both learners and teachers.

Research Objectives

1. To examine the effectiveness of Project-Based Learning through vlog creation in developing students' English grammatical knowledge; and

2. To investigate the effectiveness of Project-Based Learning through vlog creation on students' use of English grammatical knowledge in real-world contexts.

Literature Review

Grammatical knowledge and grammatical use

Grammar refers to the forms and structures of a language that govern how words are combined to convey meaning. Traditionally, grammar instruction has emphasized learning and applying grammatical rules to produce accurate sentences (Thornbury, 2001). However, contemporary linguists broadly view grammar as a system that helps people communicate clearly and predictably within the structure of their language (DeCapua, 2017). In this regard, Larsen-Freeman (2003) proposes a three-dimensional framework that conceptualizes grammar as the integration of *form* (the structure of language), *meaning* (the semantic purpose), and *use* (the appropriateness of grammar in context). To integrate pragmatic skills into instruction, grammar teaching should go beyond structural accuracy to include how and when grammar is used in everyday communication. Recent research reflects different views on how grammar is best learned. Skill acquisition theory suggests that explicit grammatical knowledge can gradually develop into accurate grammatical use through intensive practice (DeKeyser, 2015). However, other scholars highlight the importance of meaningful exposure to grammar within communicative contexts to support effective grammatical development (Ellis, 2006). The effectiveness of practice depends on whether it is meaningful, contextualized, and connected to communicative use (Nikouee & Oba, 2025). To address these perspectives, Long (1991) proposed a focus on form (FonF), which draws learners' attention to linguistic forms during meaningful communication. This approach aligns with the view that grammar learning should extend beyond *form* to include *meaning* and *use*. Building on this perspective, the study examines how students applied their grammatical knowledge through a vlog-creation project. The goal is not only grammar accuracy, but also contextual appropriateness in authentic communication. This approach helps shift grammar learning away from memorizing rules toward using language in real communicative situations.

Project-based learning through vlog creation

Project-based learning (PBL) is grounded in constructivist theory, which emphasizes learners' active role in constructing knowledge through interaction with their environment and others (Vygotsky, 1978). It also aligns with experiential learning theory (Kolb, 1984) by engaging learners in meaningful learning experiences. In language learning, PBL provides conditions that support the integration of grammatical *form,*

meaning, and *use*, particularly when implemented through vlog creation. Recent studies indicate a growing interest in PBL and vlogs in ELT, with findings suggesting positive outcomes, including improvements in learners' oral proficiency (Spring, 2020), and increased engagement and motivation (Jung, 2021). Although grammar is rarely treated as a central focus, several studies report secondary gains in learners' accuracy and grammatical awareness during language development (e.g., Sadaf et al., 2024). However, findings remain mixed, with some studies reporting improvements in accuracy but limitations in fluency or no significant gains in measurable outcomes such as pretest and posttest scores (Saputro et al., 2020; Nguyen, 2021). These inconsistencies suggest that while vlog-based PBL has pedagogical potential, its impact on grammar development is complex and context-dependent.

Despite growing research on PBL and vlog-based instruction in EFL contexts, most studies have largely emphasized speaking skills, with grammar often addressed indirectly. Research specifically examining the role of vlog-based PBL in developing students' grammatical knowledge and its use in practice remains limited. Therefore, this study addresses this gap by investigating the extent to which vlog-based PBL enhances the development of learners' grammatical knowledge and their ability to use grammar in meaningful contexts.

Research Framework

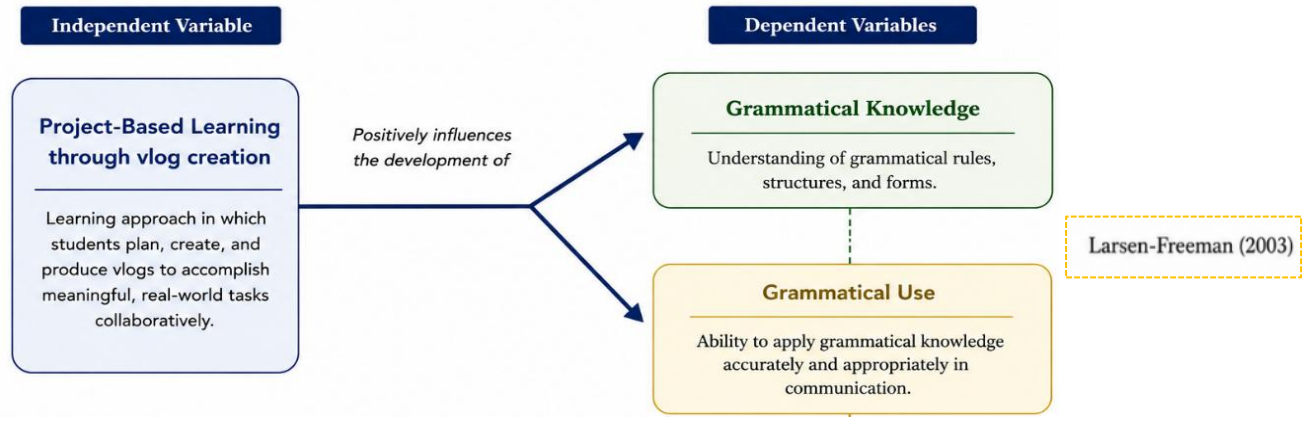


Figure 1 Concetual Framework

The research framework was developed based on Project-Based Learning (PBL) and the concept of grammar learning through meaningful language use. It includes one independent variable, Project-Based Learning through vlog creation, and two dependent variables: grammatical knowledge and grammatical use.

Research Methodology

Research Context and Participant

This mixed-methods study was conducted at a Thai university with 79 first-year English major students enrolled in a 15-week grammar course taught by the researcher. The course aimed to develop students' grammatical knowledge and their ability to use grammar appropriately in context. As part of the course assessment, students worked in self-selected groups of 6–8 members to complete a vlog project. Each group produced one vlog during the study period, consisting of four phases: planning, designing, production, and reflection. They also engaged in "Vlog Activities" at the end of each unit to reinforce grammar related to the vlog project. For example, the students created a vlog introducing themselves, focusing on using verbs (e.g., be, have, and do). Alternatively, they wrote a short vlog script to describe a favorite restaurant, movie, or place, using descriptive adjectives and adverbs. Throughout the course, each group independently developed their vlog project with guidance from the researcher as needed. Students were encouraged to use grammatical structures learned in class; however, no specific sentence patterns were mandated during vlog production. Each group then submitted the completed vlog along with reflective reports on their process, learning experiences, and challenges.

Research Instruments

This study employed validated instruments to ensure trustworthiness through methodological triangulation. Quantitative instruments included a 26-item multiple-choice grammar pretest and posttest aligned with course content, covering key grammatical areas such as parts of speech, subject–verb agreement, and tenses. A 30-item Likert-scale questionnaire was developed to investigate students' perceptions and learning experiences. It consisted of three dimensions: grammatical knowledge, grammatical use, and learning experiences during the vlog project. A five-level analytic rubric based on the Form–Meaning–Use framework (Larsen-Freeman, 2003) was employed to evaluate students' vlogs. Moreover, students' reflective reports were used to capture learning experiences. These research instruments were tested for validity and reliability before data collection to ensure their appropriateness and consistency. The tests demonstrated high reliability (Cronbach's α = .928), and the questionnaire showed excellent internal consistency (α = .967) with acceptable content validity (IOC = .67–1.00).

Data Collection

In accordance with the ethical guidelines of the Human Ethics Committee (COA No. TSU2025_104; REC No. 0162), all participants were provided with information regarding the study objectives, procedures, confidentiality, and their rights as research

participants. Informed consent was obtained electronically before participation. Following ethical approval, students completed the pretest at the beginning of the course and the posttest at the end, using the same set of questions. At the end of the course, each group submitted a completed vlog along with reflective reports. A questionnaire was also administered to individual students.

Data Analysis

Quantitative data from pretests and posttests were analyzed using descriptive statistics and paired-samples t-tests, while questionnaire data were analyzed descriptively. Vlog performances were assessed by three raters (the researcher and two ELT experts), and inter-rater reliability was calculated using the Intraclass Correlation Coefficient (ICC). ICC values between 0.50 and 0.74 indicate moderate reliability, whereas values between 0.75 and 0.89 indicate good reliability (Koo & Li, 2016). The results indicated a moderate level of agreement for the single-measure ICC (ICC = 0.57) and a high level of agreement for the average-measure ICC (ICC = 0.80). This suggested that mean scores across raters provide reliable assessments of students' communicative speaking performance. Qualitative data from reflective reports were analyzed using thematic analysis. Due to space constraints, the qualitative findings are not reported in full. They are used selectively to triangulate and support the quantitative results.

Research Results

1. Students' development of English grammatical knowledge

Table 1 Descriptive statistics of pretest and posttest

Group	Member	Pretest (M)	SD	Posttest (M)	SD
A	6	17.7	4.68	23.5	0.84
B	7	11.4	1.81	20.9	2.48
C	6	12.1	2.32	20.8	6.59
D	7	13.0	4.55	17.7	5.35
E	8	13.1	5.44	20.4	4.78
F	7	15.9	3.08	23.3	5.47
G	8	12.4	3.85	21.8	3.96
H	7	10.7	2.06	17.9	3.48
I	8	11.9	5.33	14	4.34
J	8	9.6	2.00	16.6	5.71
K	7	13.8	4.20	21	5.97
Total	**79**	**12.78**	**4.18**	**19.66**	**5.26**

Table 2 Results of paired-samples t-test

		Paired Differences					t	df	Significance	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				One-Sided p	Two-Sided p
					Lower	Upper				
Pair 1	Pretest - Posttest	-6.873	5.13	.577	-8.021	-5.725	-11.920	78	<.001	<.001

As shown in Tables 1 and 2, the mean posttest score for the entire class (M = 19.66, SD = 5.26) was significantly higher than the pretest score (M = 12.78, SD = 4.18), with a difference of 6.873 points. Furthermore, the results of the paired-samples t-test revealed a statistically significant difference between the pretest and posttest scores at the .05 level, t (78) = −11.92, p < .001. This indicated an improvement in the class's overall learning performance.

2. Students' use of English grammar

Students' vlog performance was interpreted based on the following criteria: 4.20–5.00 (excellent), 3.20–4.19 (good), 2.20–3.19 (moderate), 1.20–2.19 (poor), and 0.00–1.19 (needs improvement).

Table 3 Vlog content evaluation

Group	Grammar accuracy (Form)	Sentence variety (Form-Meaning)	Coherence & organization (Meaning-Use)	Contextual appropriateness (Use-Meaning)	Communicative effectiveness (Use)	Mean	Level
A	4.0	4.0	4.3	4.0	4.3	4.20	Excellent
B	2.7	2.7	2.0	2.7	2.7	2.50	Moderate
C	3.7	4.3	4.3	4.3	4.3	4.20	Excellent
D	3.0	3.3	3.7	3.3	3.3	3.33	Good
E	2.7	2.7	3.3	3.3	3.3	3.07	Moderate
F	2.0	2.0	2.3	2.3	2.7	2.40	Moderate
G	3.7	3.7	4.0	4.3	4.3	4.00	Good
H	3.7	3.3	4.0	4.0	4.0	3.80	Good
I	3.3	3.0	3.3	4.0	3.7	3.47	Good
J	3.3	3.0	3.7	4.3	3.7	3.60	Good
K	3.7	3.3	3.7	4.0	4.0	3.73	Good
Total	**3.2**	**3.2**	**3.5**	**3.7**	**3.6**	**3.47**	**Good**

The results show that the overall performance of the class was good (M = 3.47). In particular, Groups A and C achieved the highest scores, both at an excellent level (M = 4.20). In contrast, the groups with the lowest mean scores were Group F (M = 2.40) and Group B (M = 2.50), but their performance was still considered moderate.

When considering the results for each dimension, the analysis revealed the highest mean scores for "grammatical appropriateness in context" (M = 3.7) and "communicative ability" (M = 3.6), corresponding to the *use* and *meaning* dimensions. Although the *form* dimension received the lowest mean score (M = 3.2), it remained at a good level.

A summary of the questionnaire results on students' perceptions of the development of their grammatical knowledge and their grammatical use is shown below.

Table 4 Students' perceptions of grammatical knowledge and grammatical use

Group	Grammar knowledge		Level	Grammar use		Level
	M	SD		M	SD	
A	4.30	0.14	High	4.43	0.12	High
B	4.42	0.18	High	4.19	0.19	High
C	4.03	0.21	High	3.79	0.05	High
D	4.44	0.17	High	4.54	0.06	Very high
E	4.27	0.11	High	4.12	0.20	High
F	4.51	0.12	Very high	4.54	0.02	Very high
G	4.33	0.20	High	4.24	0.14	High
H	4.36	0.22	High	4.73	0.13	Very high
I	4.40	0.19	High	4.17	0.08	High
J	3.73	0.17	High	3.53	0.15	High
K	4.11	0.40	High	4.03	0.20	High
Total	**4.26**	**0.11**	**High**	**4.21**	**0.12**	**High**

Note. 4.51–5.00 = Very high; 3.51–4.50 = High; 2.51–3.50 = Moderate; 1.51–2.50 = Low; and 1.00–1.50 = Very Low

Overall, all groups reported high to very high levels of perceived grammatical knowledge development (M = 3.73–4.51) and perceived grammar use in communication (M = 3.53–4.73). This indicates positive perceptions across both dimensions.

Discussion

This study found that vlog-based PBL had a positive impact on students' grammatical knowledge and grammatical use. The pretest and posttest data showed that the vlog creation project had a statistically significant effect on learners' grammatical knowledge ($p < .001$). In particular, Groups B and G demonstrated the greatest improvement (+9.4 points), which aligned with the questionnaire results, in which students reported a high level of perceived improvement, with mean scores of 4.42 and 4.33, respectively. The reflective reports further supported these quantitative

results. For example, Group B reported more natural English use, including improved pronunciation, vocabulary, and grammatical structures. Group G also reported gains in script writing, appropriate grammar use, vocabulary, and confidence in presenting ideas in authentic contexts. The improvement in students' grammatical knowledge may be linked to learning mechanisms, which can be interpreted through the lenses of noticing and focus on form. In creating vlogs, students had to plan scripts and present content to real audiences. These processes encourage them to recognize the relationships among sentence components, understand a variety of sentence structures to communicate accurately, and learn to use conjunctions to ensure coherence and continuity in storytelling. Through the iterative process of script writing and accuracy checking, students may have become aware of gaps between what they intended to express and the language forms appropriate in the context, thereby enhancing grammatical awareness. The attention to form was evidenced in the students' reflective report. For example, students noted that vlog production required them to "*write scripts and speak English using grammatically correct structure*" (Group B) and apply "*appropriate tenses for different situations*" (Group C). Such awareness reflects learners' engagement with grammar during the vlog project. This process aligns with Schmidt's (1994) Noticing Hypothesis, which emphasizes that conscious attention to form during language production supports grammatical development. Early studies have shown that form-focused instruction is most effective when it is integrated into meaningful communication, allowing students to plan and access explicit grammatical knowledge during communicative tasks (e.g., Yuan & Ellis, 2003).

Apart from grammatical knowledge, the vlog project also supported students' use of grammar in communication, as evidenced by the strongest development in the *meaning* and *use* dimensions of the students' vlogs. Reflective reports support this finding. The students reflected on their perceived abilities to use English in real situations, such as interviewing tourists in English and using appropriate tenses for different contexts. Questionnaire data further confirmed these findings, as all groups reported high to very high levels of perceived development in grammar use (M = 3.53–4.73), with an overall mean score of 4.21. The improvement of students' grammatical use can be explained through repeated opportunities to apply and revise grammatical structures during the vlog project. These activities encouraged students to evaluate and refine their language choices, which may have strengthened their ability to use grammar more appropriately in communication. In addition, students were supported through scaffolded learning experiences, such as vlog-related tasks and teacher guidance. Together, these learning experiences may have facilitated the development of students' grammatical use beyond isolated form-focused practice. This finding aligns with transfer-

appropriate processing (Nikouee & Oba, 2025), which suggests that effective learning depends on the similarity between practice and real-world language use. Because students repeatedly applied grammatical knowledge while planning, scripting, revising, and presenting their vlogs, they may have become better at using grammar to communicate their intended messages.

The findings of this study show that vlog-based PBL had a positive impact on students' grammatical knowledge and their ability to use it. The improvement in students' grammatical knowledge observed in this study is consistent with the findings of Sadaf et al. (2024), who reported that vlog-based learning activities contributed to learners' grammatical accuracy and grammatical awareness. Nevertheless, the results are not fully consistent with other studies. Nguyen (2021) found no significant gains in test scores, although students made gains in their communicative use. Similarly, Saputro et al. (2020) found higher accuracy but lower fluency and complexity. This suggests that language learning is complex and multi-dimensional and that integrating *form, meaning*, and *use* is not always easy in different contexts. In addition, research shows that teaching grammar in isolation is less effective than integrating it into meaningful activities (Nassaji & Fotos, 2011). As Wen and Zhu (2022) point out, when instruction focuses on grammatical knowledge rather than meaningful use in real communicative contexts, it may limit the development of learners' communicative competence. At the same time, Gul et al. (2022) caution that focusing too much on only one aspect, such as *use*, can result in unbalanced language development.

These concerns suggest the need for teachers to design learning experiences that support the balanced development of grammatical *form, meaning*, and *use*, or what Larsen-Freeman (2003) has termed "grammaring." According to her, grammar learning processes should not be viewed as something acquired and finished, but as a continuous process that requires constant practice and development through real communicative language use. The vlog project addressed this need by providing opportunities for learners to use grammar accurately and appropriately in meaningful contexts. Through content planning and spoken performance, students connected grammatical knowledge with authentic communication, suggesting that vlog-based PBL potentially supports balanced grammatical development.

Body of knowledge

Project-Based Learning through vlog creation facilitates the transformation of explicit grammatical knowledge into meaningful language use through scaffolded practice, content writing, and spoken performance.

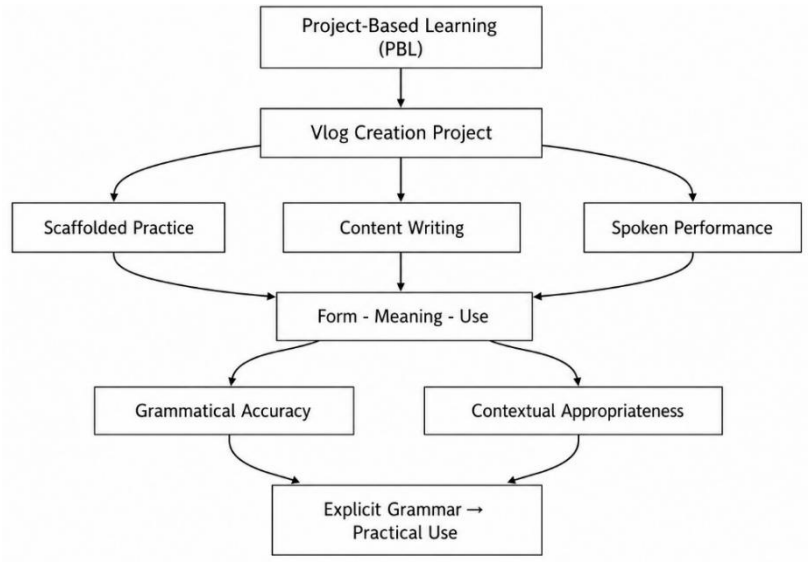


Figure 2 An integrated framework of grammar learning through vlog -based PBL.

Conclusion

This study suggests that participation in vlog-based PBL was associated with improvements in students' grammatical knowledge and their ability to apply grammatical structures in communication. These findings highlight the potential of vlog-based PBL as a pedagogical approach for integrating grammar instruction with communicative language use in EFL university classrooms.

Recommendation

1. Recommendation for utilizing research findings

This study offers practical implications for ELT educators by demonstrating that vlog-based PBL can enhance engagement and effectiveness in grammar learning. To achieved this, teachers should: (1) design vlog tasks that incorporate planning, drafting, and revising stages to support purposeful language production; (2) provide ongoing scaffolding through language inputs, model texts or video; (3) evaluate learners' performance in terms of form, meaning, and use, rather than grammatical accuracy alone, and 4) integrate reflective tasks to raise learners' awareness of how grammar is used in authentic communication.

2. Recommendation for further research

This study employed group-based evaluation because of the nature of the project tasks and the larger number of students. So, the approach may not fully capture individual development. Moreover, the lack of a control group limits the ability to establish a causal relationship between the intervention and the observed learning

outcomes. In future research, assessment tools such as peer or self-assessment may be used to complement group performance assessment and to gain an understanding of the learning processes of both the individual and group. The inclusion of a control group is also recommended to provide stronger evidence of the effectiveness of vlog-based PBL. Despite these limitations, this study can provide useful insight into the potential benefits of vlog-based PBL in ELT. Moreover, it offers practical implications for teachers to design innovative teaching methods that can encourage greater learner engagement and foster effective teaching practices.

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