

Exploring the Impact of Microsoft Flip on Vocabulary Retention of Thai Business English Undergraduates

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Abstract

This study investigates the effectiveness of the video discussion platform, Microsoft Flip, on vocabulary retention among Business English undergraduate students in a Thai EFL context. It also examines students' perceptions of the platform's use as a pedagogical tool. Employing a one-group pre-test/post-test quasi-experimental design, the study involved 15 purposively sampled Business English majors at Roi Et Rajabhat University who participated in an 8-week vocabulary intervention using Microsoft Flip. Data were collected through pre- and post-vocabulary tests and a mixed-methods student perception questionnaire. A paired-samples t-test revealed a statistically significant improvement in overall vocabulary acquisition scores from pre-test to post-test ($t(14) = 5.87, p < .001$, Cohen's $d = 1.51$), indicating that Microsoft Flip positively affected vocabulary retention. Further analysis of paired t-tests showed significant gains in both receptive and productive vocabulary knowledge. Quantitative and qualitative analyses of the questionnaire data demonstrated overwhelmingly positive student perceptions, highlighting enhanced engagement, perceived learning effectiveness, and increased confidence in using specialized vocabulary. These findings suggest that Microsoft Flip can be a valuable tool for EFL vocabulary instruction, offering interactive and engaging opportunities for learners. The study provides practical pedagogical implications for integrating video-based, student-centered platforms into language classrooms and lays the groundwork for future research in diverse EFL contexts.

Keywords: microsoft flip, vocabulary retention, EFL, Business English, technology-enhanced learning

Introduction

In an increasingly globalized world, English has solidified its position as the international lingua franca, making proficiency indispensable across professional domains (Crystal, 2012). For university graduates aspiring to careers in commerce and industry, a strong command of Business English is no longer merely an asset but a fundamental requirement for effective communication, negotiation, and overall professional success (Donna, 2000). Consequently, higher education institutions are tasked with equipping students with the robust English language skills needed to thrive in the global marketplace.

Despite the critical importance of English, many English as a Foreign Language (EFL) learners face persistent challenges in acquiring and, more importantly, retaining vocabulary (Thornbury, 2002). Vocabulary acquisition is widely recognized as the cornerstone of language proficiency, underpinning the development of all four macro-skills: reading, writing, listening, and speaking (Wilkins, 1972). Without a robust lexicon, effective communication remains severely hampered, regardless of grammatical knowledge (Schmitt, 2010). In the Thai context, EFL students often encounter specific hurdles, including limited exposure to authentic English outside the classroom, a reliance on rote memorization, and insufficient opportunities for active, contextualized vocabulary use, which leads to poor long-term retention (Watcharapunya & Usaha, 2013).

In response, language education has increasingly turned to digital tools to create more engaging and effective learning environments. Computer-Assisted Language Learning (CALL) offers unprecedented opportunities to diversify learning modalities, provide authentic input, and facilitate interaction (Chapelle & Sauro, 2017). Platforms such as Learning Management Systems (LMS) and mobile applications have become integral to modern pedagogy, aiming to address the limitations of traditional classroom settings (Godwin-Jones, 2017).

Microsoft Flip (formerly Flipgrid) has gained considerable traction among these emerging tools. Flip is a video discussion platform where educators post prompts and students respond with short videos, fostering asynchronous interaction (Green & Blevins, 2022). Its video-centric nature aligns with communicative language teaching principles by promoting authentic language production and peer collaboration (Kaur & Meni, 2021). While recent studies have highlighted the positive perceptions and engagement benefits of video-based platforms in language learning (Sujarwati et al., 2025; Kaur & Meni, 2021), a critical research gap persists regarding the specific empirical impact of Microsoft Flip on quantifiable vocabulary *retention* among Business English students, particularly within the distinct Thai EFL context. This study addresses this gap by empirically investigating how Microsoft Flip can support the long-term acquisition of Business English vocabulary. This study's findings are expected to provide practical teaching insights for incorporating video-based, student-centered platforms into EFL vocabulary lessons, especially within Business English education in Thailand.

Research Objectives

This study aims to achieve the following objectives:

1. To investigate the effectiveness of using Microsoft Flip on the overall vocabulary retention (pre-test vs. post-test scores) of Business English undergraduate students
2. To analyze the impact of Microsoft Flip on specific aspects of vocabulary acquisition, namely, receptive and productive knowledge
3. To explore Business English undergraduate students' perceptions regarding using Microsoft Flip for vocabulary learning

Research Methodology

This study used a quantitative research approach to assess Business English undergraduate students' perceptions of using Microsoft Flip to support their vocabulary learning. Quantitative data were collected from vocabulary tests administered before and after the Microsoft Flip intervention, as well as from a questionnaire given after the intervention to gauge students' perceptions. Qualitative data was obtained from open-ended questions that invited students to share their experiences.

Population and Sample

The population for this study consisted of freshman Business English majors at Roi Et Rajabhat University during the second semester of the 2024 academic year. A purposive sample of fifteen (15) students was chosen. It is crucial to acknowledge that while this sample size was appropriate for an in-depth exploratory study within this specific intact classroom setting, its small scale inherently limits the generalizability of the findings to broader populations of EFL learners. This non-probability sampling method specifically included participants who were actively studying Business English and could provide relevant insights into the intervention (Creswell & Poth, 2018).

Research Design

This study employed a one-group pre-test/post-test quasi-experimental design, a design commonly used in educational settings to evaluate changes in a group following an intervention (Campbell & Stanley, 1963). The design is represented as:

$$O1 \rightarrow X \rightarrow O2$$

O1 is the pre-test, X is the 8-week Microsoft Flip intervention, and O2 is the post-test. While this design has limitations regarding internal validity, it is practical for exploratory research within intact classroom settings.

Research Instruments

This study used two primary instruments: vocabulary tests (pre- and post-) and a student perception questionnaire, both of which were carefully designed to collect detailed data from the Business English undergraduate students regarding using Microsoft Flip in vocabulary retention.

Vocabulary Tests: A 50-item test, balanced between receptive (e.g., matching) and productive (e.g., fill-in-the-blanks) tasks, was developed based on the Business English curriculum. The test's content validity was established through review by three English language teaching experts. A pilot study with a similar student group yielded a Cronbach's Alpha of $\alpha = .85$, indicating good internal consistency and reliability (Taber, 2018).

Student Perception Questionnaire: This instrument contained 20 Likert-scale items (1=Strongly Disagree, 5=Strongly Agree) and three open-ended questions. The items were designed to assess usability, engagement, and perceived learning outcomes. The scale demonstrated high reliability with a Cronbach's Alpha of $\alpha = .91$.

The open-ended questions invited students to elaborate on their experiences. The content validity of both instruments was measured using the Index of Item-Objective Congruence (IOC), with scores of 0.7 for the Vocabulary and 0.8 for the questionnaire, respectively, indicating strong agreement among three language experts.

Data Collection and Analysis

Following strict ethical approval, the research started with administering the pre-test to all participants in Week 1. This initial assessment, a 50-item vocabulary test carefully designed to cover both receptive (e.g., matching) and productive (e.g., fill-in-the-blank) knowledge of Business English vocabulary from the curriculum, established baseline proficiency. An intensive 8-week intervention period then began. During this phase, students actively used Microsoft Flip, completing a series of structured weekly vocabulary tasks. These tasks specifically required students to produce video responses, articulate definitions, use target vocabulary in context, and interact with peers' submissions through video comments or written feedback, promoting active language use and collaborative learning. After the intervention concluded in Week 10, a post-test identical to the pre-test was administered to assess vocabulary growth. At the same time, a comprehensive student perception questionnaire, comprising 20 Likert-scale items and three open-ended questions, was distributed to capture nuanced experiences related to usability, engagement, and perceived learning outcomes.

For quantitative data analysis, descriptive statistics (means, standard deviations, minimums, and maximums) are used to summarize test scores. Paired-samples t-tests were used to identify significant differences between pre-test and post-test scores for overall vocabulary, as well as receptive and productive vocabulary, utilizing IBM SPSS (Version 28.0). Meanwhile, qualitative data from the open-ended questions in the perception questionnaire underwent a careful thematic analysis, following the systematic procedures outlined by Braun and Clarke (2012), to identify common patterns, ideas, and themes in students' responses and experiences.

Research Results

1. To investigate the effectiveness of using Microsoft Flip on the overall vocabulary retention (pre-test vs. post-test scores) of Business English undergraduate students

A paired-samples t-test was conducted to compare the pre-test and post-test scores for overall vocabulary retention. Table 1 presents the descriptive statistics and paired-samples t-test results.

Table 1

Overall Vocabulary Scores and Paired-Samples t-test Results (N=15)

Test	N	Mean (\bar{x})	S.D.	Mean Difference	S.D. of Difference	t- value	Df	Sig. (2- tailed)/p- value
Pre-test	15	28.33	4.12					
Post-test	15	40.53	3.89					
Difference				12.20	8.08	5.87	14	<.001

As shown in Table 1, the mean score for the pre-test was 28.33 (S.D. = 4.12), while the post-test score increased significantly to 40.53 (S.D. = 3.89). This reflects an average gain of 12.20 points per student. To verify if this increase was statistically significant, a paired-samples t-test was performed. The results showed a significant difference between the pre-test and post-test vocabulary scores ($t(14) = 5.87, p < .001$). Since the p-value ($< .001$) is lower than the usual alpha level of 0.05, the null hypothesis (H_0) that there is no significant difference in overall vocabulary scores before and after using Microsoft Flip is rejected. The Cohen's d of 1.51 indicates a very large effect size, suggesting that the Microsoft Flip intervention had a substantial and positive impact on students' overall Business English vocabulary learning. This result clearly shows that using Microsoft Flip significantly improved students' Business English vocabulary retention.

2. To analyze the impact of Microsoft Flip on specific aspects of vocabulary acquisition, namely, receptive and productive knowledge.

Further analysis was conducted to examine the impact of Microsoft Flip on different aspects of vocabulary acquisition: receptive vocabulary (recognition) and productive vocabulary (usage). Paired-samples t-tests were conducted for each aspect, with the descriptive statistics and t-test results presented in Table 2.

Further analysis was conducted to examine the impact of Microsoft Flip on different aspects of vocabulary acquisition: receptive vocabulary (recognition) and productive vocabulary (usage). Table 2 provides the descriptive statistics and paired t-tests for these two aspects.

Table 2

Receptive and Productive Vocabulary Scores and Paired-Samples t-test Results (N=15)

Aspect	Test	N	Mean (\bar{x})	S.D.	Mean Differ ence	S.D. of Differ ence	t- valu e	Df	Sig. (2- tailed)/ p-value
Receptive	Pre-test	15	16.20	2.58					
	Post-test	15	21.87	2.13					
	Differen ce				5.67	4.51	4.87	14	<.001
Productive	Pre-test	15	12.13	2.19					
	Post-test	15	18.67	1.76					
	Differen ce				6.53	3.99	6.34	14	<.001

As shown in Table 2, both receptive and productive vocabulary scores improved from pre-test to post-test. For receptive vocabulary, the mean score increased from 16.20 (SD = 2.58) to 21.87 (SD = 2.13). For productive vocabulary, the mean score went up from 12.13 (SD = 2.19) to 18.67 (SD = 1.76). The results in Table 2 demonstrate that Microsoft Flip significantly impacted both receptive and productive vocabulary development. A statistically significant improvement was observed for receptive vocabulary ($t(14) = 4.87, p < .001$) and for productive vocabulary ($t(14) = 6.34, p < .001$). The Cohen's d values of 1.26 for receptive vocabulary and 1.64 for

productive vocabulary both indicate very large effects. Notably, the gain in productive vocabulary scores (mean difference = 6.53) was slightly higher than that for receptive vocabulary (mean difference = 5.67), strongly suggesting that the video-based output feature of Flip particularly boosted active use and recall of Business English terms. This indicates that the increase in productive vocabulary (mean difference = 6.53) was slightly greater than in receptive vocabulary (mean difference = 5.67), showing that Flip's video-based output especially encouraged the active use and recall of Business English vocabulary, resulting in more substantial improvements in productive knowledge.

3. To explore Business English undergraduate students' perceptions regarding using Microsoft Flip for vocabulary learning

The analysis of the questionnaire data showed overwhelmingly positive opinions from Business English undergraduate students about using Microsoft Flip for vocabulary learning.

Quantitative Results (Likert Scale)

Table 3 summarizes the mean scores and standard deviations for the Likert scale items, categorized by thematic areas. The 5-point scale (1=Strongly Disagree, 5=Strongly Agree) indicates that higher mean scores reflect more positive perceptions.

Table 3

Student Perceptions towards Microsoft Flip for Vocabulary Learning (N=15)

Thematic Area	Mean (\bar{x})	SD	Interpretation
Usability & Accessibility	4.45	0.58	Students found Microsoft Flip very easy to use and navigate.
Engagement & Motivation	4.62	0.49	Students were highly engaged and motivated by Microsoft Flip.
Perceived Learning Outcomes	4.38	0.65	Students believed Microsoft Flip significantly helped their learning.
Overall Satisfaction	4.55	0.52	Students were very satisfied with using Microsoft Flip.

The quantitative results indicate a strong positive perception across all thematic areas. Students rated "Engagement & Motivation" highest (\bar{x} = 4.62), followed closely by "Overall Satisfaction" (\bar{x} = 4.55) and "Usability & Accessibility" (\bar{x} = 4.45). "Perceived Learning Outcomes" also showed a high mean score of 4.38. These high mean scores suggest that students found Microsoft Flip user-friendly, highly engaging, and effective for their Business English vocabulary acquisition.

Qualitative Results (Open-ended Questions)

The thematic analysis of the open-ended questionnaire responses further substantiated the positive quantitative findings, revealing three prominent themes: Enhanced Engagement and Fun, Practical Application and Confidence, and Peer Interaction and Feedback. While not formally quantified by frequency counts due to the exploratory nature of the qualitative component, these themes were consistently articulated by a majority of participants.

Theme 1: Enhanced Engagement and Fun

Many students expressed that Microsoft Flip made vocabulary learning more enjoyable and less tedious than traditional methods. The video-based format was particularly appealing.

"Learning new words with Flip was so much fun! It's better than just reading from a book because I can see and hear myself." (Student 3)

"I always dreaded vocabulary memorization, but recording videos made it feel like a game. It kept me motivated." (Student 8)

"It's a creative way to learn. I liked adding stickers and using different backgrounds; it made me less nervous." (Student 11)

Theme 2: Practical Application and Confidence

Students reported that Flip helped them actively apply vocabulary in meaningful contexts, boosting their confidence in speaking and using Business English terms. Creating videos forced them to move from receptive recognition to productive use.

"Having to explain the business terms in my own words and give examples helped me understand them deeply. It's not just memorizing." (Student 5)

"I feel more confident speaking Business English now. Before, I only knew the words, but couldn't use them. Flip made me use them." (Student 14)

"It was challenging at first to record myself, but then I got used to it and felt proud when I could explain things clearly in English." (Student 7)

Theme 3: Peer Interaction and Feedback

The opportunity to watch and respond to peers' videos was highlighted as a significant benefit, fostering a collaborative learning environment and providing diverse perspectives.

"I learned a lot from watching my friends' videos. Sometimes they explained a word in a way I hadn't thought of, or used it in a new sentence." (Student 2)

"Giving feedback to my classmates made me think more carefully about the vocabulary. It's like teaching, so it really solidified my own understanding." (Student 9)

"The comments and replies from my teacher and friends were very helpful. It felt like a real conversation, not just a test." (Student 13)

Discussion

Our study makes a critical and timely contribution by empirically demonstrating a statistically significant improvement in Business English vocabulary retention directly attributable to the use of Microsoft Flip. This strong quantitative evidence, supported by large effect sizes, goes beyond anecdotal reports and convincingly validates Flip's pedagogical effectiveness for language learning. The requirement for students to create videos directly supports Swain's (1995) Output Hypothesis, which claims that language production ("pushed output") encourages learners to process language more deeply. By articulating definitions and using terms in context, students engage in meaningful cognitive processing that, according to Craik and Lockhart's (1972) levels of processing framework, results in more durable memory traces. This addresses the common challenge faced by Thai EFL students of superficial rote memorization (Watcharapunyawong & Usaha, 2013). The significant increase in productive vocabulary is especially important, as it indicates that video-based production tasks can effectively bridge the gap between passive knowledge and active use—an essential goal in language proficiency.

Furthermore, the interactive features of Flip profoundly resonate with Vygotsky's (1978) sociocultural theory. Peer-to-peer commenting and feedback fostered a dynamic Zone of Proximal Development (ZPD) where students could co-construct knowledge and learn from each other. This finding strongly corroborates other recent research indicating that the social and interactive nature of Flip promotes language learning and reduces anxiety (Green & Blevins, 2022; Kaur & Meni, 2021). The overwhelming positive student perceptions gathered in our study further strengthen these quantitative findings, consistently highlighting enhanced engagement, increased confidence, and perceived learning effectiveness. This positive reception is highly consistent with prior studies that frame Flip as a tool merging social media conventions with academic tasks, thereby significantly increasing student buy-in (Johnson & Skarphol, 2018). The students' palpable sense of improved confidence and their appreciation for peer learning unequivocally underscore Flip's robust capacity to foster a supportive and collaborative learning community, effectively addressing the affective filter that can hinder language production (Krashen, 1982).

While the positive results are clear, it is important to carefully examine potential confounding variables. The observed improvements could be influenced by factors such as the inherent novelty effect of introducing new technology, which often generates initial excitement. Additionally, the specific nature of teacher support and scaffolding provided during the intervention, along with the unique peer influence dynamics within this particular classroom, may have played a role. These considerations are common in quasi-experimental designs and highlight the need for future research that includes control groups. Compared to earlier studies, this research uniquely provides empirical, quantitative evidence of vocabulary retention, specifically differentiating between receptive and productive gains—a distinction often lacking in perception-focused studies. While Green and Blevins (2022) and Kaur and Meni (2021) emphasized positive perceptions of Flip, our study confirms these perceptions with measurable learning outcomes, demonstrating how these positive experiences translate into real improvements in vocabulary mastery within a specific EFL setting.

Recommendations

Based on this study's compelling findings, several recommendations are proposed for both teaching practice and future research. From a teaching perspective, the results strongly support the strategic use of video-based output tools, such as Microsoft Flip, in EFL curricula to enhance traditional vocabulary teaching. Educators are encouraged to create tasks that require students to actively produce language in meaningful contexts, moving beyond passive knowledge and encouraging deeper thinking and stronger retention. To maximize the platform's benefits, instructors should carefully design activities that foster authentic peer interaction and constructive feedback, which supports a collaborative learning environment and can greatly reduce language-production anxiety. It is also highly recommended to scaffold these activities, starting with low-stakes tasks to gradually build student confidence before progressing to more challenging assignments. To ensure successful implementation, curriculum designers should embed Flip-based vocabulary tasks into course structures, while IT staff must provide reliable access and technical support for both teachers and students. Institutional backing, including teacher training and resource allocation, is also vital for widespread adoption and effective pedagogical use.

For future research, this study provides an essential foundation for more comprehensive investigations. Subsequent studies should replicate this research with a substantially larger and more diverse sample, along with a more rigorous quasi-experimental design that includes a carefully matched control group. This will significantly improve both the internal validity and generalizability of the results. Additionally, longitudinal studies are crucial to assess vocabulary retention over longer periods, offering valuable insights into the long-term effectiveness of this learning method. Comparative research examining the effectiveness of Microsoft Flip against other technology-enhanced vocabulary tools or traditional methods, using varied assessment types, could also give educators vital information for making informed instructional decisions. Finally, future studies might explore how video-based platforms influence other key language skills, such as oral fluency, pronunciation, presentation skills, and intercultural communicative competence across different EFL settings.

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