

Enhancing English Vocabulary Achievement among Hmong Ethnic Primary Students in Thailand through Play-Based Learning

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Article information	
Abstract	Play-based learning along with frame semantics offers a promising method to enhance the English vocabulary of young learners, especially from an underserved language-minority group such as Hmong in northern Thailand. The purpose of this study was to investigate the effectiveness of an integrated approach to frame semantics and play-based learning for English vocabulary learning among Hmong Ethnic primary students and the related instructional materials. Seven teachers participated in a six-hour professional training session, and the English subject teacher implemented play-based instruction for 11 weeks with 29 students from Grades 1-3. The instruments were a pre-test, post-test, perception questionnaire, interview, and teacher observation notes. Quantitative findings using Wilcoxon signed-rank test revealed significant improvements in students' vocabulary achievement scores ($Z = -4.495, p < .001, r(c) = 0.52$) with a large effect size after the intervention, and qualitative results reported students' enjoyment, increasing motivation, an anxiety-free environment, and better relations among peers. Additionally, teachers had positive perceptions of the developed materials and play-based activities, but some challenges were identified, including material development, participation levels, and assessment during play. The findings suggested that this approach might create an equal opportunity to learn English for ethnic minority schools in remote Thai areas with resource constraints.
Keywords	play-based learning, frame semantics, Hmong ethnic primary students, Sustainable Development Goals (SDG)
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1. Introduction

English has long been a national priority in Thailand, where the Ministry of Education has adopted the Common European Framework of Reference for Languages (CEFR) to guide curriculum design and assessment (Ministry of Education, 2014). However, despite these efforts, Thailand remains among the lowest-ranked countries in English proficiency, according to the Education First English Proficiency Index (EF EPI) for 2023-2025 (EF Education First,

2023; 2024; 2025). Several studies have found that many Thai students, especially those in the ethnic minority community, fail to achieve English learning outcomes aligned with CEFR levels, particularly vocabulary knowledge, which is considered a fundamental basic element in early childhood English language development (Krongbuaban, 2024; Sripumma, 2023; Suebruang, 2023). Many ethnic minority students, for instance the northern-Hmong children in Thailand, have difficulty learning and achieving their potential due to linguistic and socio-educational barriers. In Phayao province, for instance, ethnic minority groups, including Mien, Hmong, and Akha children, face barriers to accessing education because of geographical distance from schools and limited educational resources, as well as linguistic challenges (Inthapthim et al., 2024). Additionally, Sathientharadol (2020) reported that most Hmong children at Betty Dumen Border Patrol Police School, who learn Thai as a second language and English as a third, have limited exposure to English input, leading to slower vocabulary growth, illiteracy, and low scores on the Ordinary National Educational Test (O-NET), which serves as the achievement test to assess students' performance at each educational level across Thailand. Previous research has convincingly documented persistent challenges related to student engagement, insufficient instructional materials, and low academic achievement among these students in remote schools (Krongbuaban, 2024; Sripumma, 2023; Suebruang, 2023; Ritthirat & Chiramane, 2014). These constraints often lead to lack of motivation and negative attitudes toward English, not only sabotaging long-term language acquisition but also disrupting the opportunities for their academic and future career development that they might have taken advantage of instead.

These contextual challenges are particularly evident in remote border areas, where small primary schools often face limitations in access to qualified English teachers and instructional materials. In response, border patrol police officers contribute to educational provision by assuming teaching roles, including in English subjects, in addition to their primary responsibilities. As noted by Sathientharadol (2020), these individuals are typically trained in fields unrelated to English teaching and are required to take on multiple roles. This scenario reflects an urgent need for specialized professional development in both English and methodologies designed specifically for young children, including how to manage a classroom of underserved students. These constraints limit instructional quality and contribute to students' low English proficiency, particularly in vocabulary knowledge, which forms the foundation of language development. Due to their limited exposure to English and the lack of specialized instruction, approaches that require higher levels of linguistic competence, such as English Medium Instruction (EMI), may not be appropriate in this context. Instead, research on young learners suggests that play-based and activity-based approaches, such as songs, games, and interactive tasks, can lower affective barriers and promote vocabulary acquisition through meaningful and repeated exposure. Supporting this, Sathientharadol et al. (2025) found that Hmong students demonstrated positive attitudes toward such activities, indicating their potential suitability for this learner group.

In line with the United Nations Sustainable Development Goal 4 (SDG 4) on Quality Education (UNESCO, 2016; 2020), this study emphasizes the need for inclusive and equitable quality education for all learners, especially those in remote ethnic minority communities in northern Thailand. Regarding the issue, these underserved students encounter linguistic, sociocultural and resource-related obstacles that limit their EFL development (Dhedchawanagon, 2023; Khota et al., 2025; Premsrirat & Person, 2018; Sangkun, 2022).

Therefore, it is important to minimize inequality and promote sustainable educational development through high-quality, contextually relevant instruction.

Because of these challenges, there is a growing need for instructional approaches or methods that are appropriate, engaging, and feasible for teachers with limited professional training. Play-based learning has been shown to enhance young learners' motivation, interaction, and vocabulary acquisition by integrating movements, games, and meaningful language use (Cheep-Aranai & Wasanasomsithi, 2016; Kuahouikhwang, 2023). Additionally, prior studies (e.g., Thongkamkaew & Chumkhong, 2023), conducted with Thai border patrol police schoolteachers, suggest that play-based learning offers a practical way to enhance students' learning of English, as its flexibility makes it suitable for those teachers in resource-poor contexts and multilingual classrooms.

However, despite its potential, research on the implementation and effectiveness of play-based learning for English vocabulary development among ethnic minority primary students in Thailand remains limited. To address this gap, the present study investigates the use of play-based learning activities to enhance the English vocabulary learning of underserved students at a remote border school in northern Thailand and to support educational equity in marginalized contexts. Therefore, the objective of this study is to investigate the effectiveness of play-based learning on English vocabulary achievement of Hmong ethnic primary students in Thailand.

2. Literature Review

2.1 Play-Based Learning in EFL Contexts

Play-based learning is recognized as an effective teaching approach in which young learners can construct knowledge through enjoyable, meaningful, and socially interactive activities. In addition to promoting active involvement, it also fosters holistic development, namely social-emotional, linguistic, and cognitive, which is a critical factor in motivation and development of language for young learners (Petsangsri & Sitthimongkolchai, 2019). Play-based learning in the EFL classroom has been shown to have a favorable influence on EFL students' attitudes and language outcomes. Studies conducted in Thailand have indicated that young learners approve of play-based activities, which have a positive impact on long-term vocabulary retention (Cheep-Aranai & Wasanasomsithi, 2016). These gains are not limited to vocabulary but also encompass reading and disciplinary learning, such as science (Pem & Sakulwongs, 2022). Importantly, play-based learning lowers the affective filter and maximizes the use of meaningful language, which has been shown to be beneficial for learners with low language exposure, such as many ethnic minority students living in northern Thailand.

Since play-based learning is a flexible and resource-efficient approach that can be customized to students' varying needs, it holds potential for teachers in remote schools with limited expertise in English teaching. This makes it more relevant to contexts like Hmong ethnic primary schools, where teachers often face heavy workloads and without formal ELT training. Moreover, Vygotsky's sociocultural theory (Cole et al., 1978) emphasizes the importance of social interaction and scaffolding within the learner's Zone of Proximal Development (ZPD). Scaffolded, interactive activities are essential for young learners with limited English skills to learn the language over time. In this regard, play-based and activity-based approaches, such as songs, games, and pronunciation practices, are particularly suitable, as they provide meaningful, low-anxiety contexts for language use and repetition. In support

of this view, Sathientharadol et al. (2025) demonstrated positive attitudes toward such activities, suggesting that they align well with young learners' developmental needs.

2.2 Vocabulary Acquisition among EFL Young Learners

All aspects of language proficiency, including speaking, writing, listening, and reading, are based on vocabulary knowledge; consequently, vocabulary development is regarded as fundamental to successful language acquisition (Read, 2000; Nation, 2013; Nordlund & Norberg, 2020). For young EFL learners, vocabulary learning should be based on strategies that account for developmental and cognitive aspects, such as short attention spans, reliance on concrete concepts, and the need for repetition and meaningful input (Cameron, 2001). Sitompul (2020) outlined the principles of vocabulary instruction for children: learning should be enjoyable, repetitive, contextualized, connected to students' interests, and embedded in meaningful action. These features align well with play-based activities where students manipulate physical objects, engage in gestures, and interact with contextualized language experiences.

Effective vocabulary instruction for young learners involves both intentional and incidental learning strategies, including repetition across varied contexts, multimodal input, and opportunities for meaningful language use (Nation, 2013; Schmitt, 2010). Learners' metacognition could be scaffolded by tools such as vocabulary notebooks and pictures, while opportunities for scaffolding arise naturally through social interaction and imitation. This is particularly important for multilingual students, especially young Hmong students, who often learn English as a third language and may have limited exposure to English beyond the classroom (Srichaiwong et al., 2025). Unfortunately, some studies further report additional challenges for ethnic minority students in rural areas in Thailand, including limited access to quality learning materials, lack of exposure to English outside school (Srichaiwong et al., 2025), and insufficient professional knowledge as well as limited ongoing support for English instruction (Uthaiakun et al., 2024). These conditions point to the need for vocabulary-teaching methods that are simple, context-rich, and accessible to both teachers and students. Moreover, the Hmong English classroom environment would be conducive to positive gains in English vocabulary proficiency through meaningful interactive activities that align well with learners' language proficiency and developmental characteristics. In such cases, when frame semantics is applied to play-based learning, students learn from the context of words occurring in a situation or concept frame. The methodology effectively anchors vocabulary learning in relevant contexts.

2.3 Frame Semantics as a Framework for Vocabulary Material Design

Frame Semantics (Fillmore, 1982) provides a semantic framework that considers the meaning of a word to be embodied in the situational or conceptual "frame" that reflects what speakers activate in their minds when they use that word. Rather than defining word knowledge as discrete pieces of information, this model emphasizes the connectivity among words in contextually relevant situations. For language learners, this implies that vocabulary is better learned when presented in thematic or situational clusters rather than discrete, decontextualized word lists. The use of frame semantics in second- and foreign-language learning is efficient at expanding students' vocabulary knowledge and enabling them to engage in the contextualized use of language. Dalpanagioti (2023) adopted a task-based approach to

teaching metaphors in English using frames and reported better students' conceptual understanding as vocabulary terms are linked within a meaningful frame. Likewise, Rahmati Nejad and Ghayoomi (2021) used frame-based materials to teach Persian verbs to non-native learners, which helped students understand even subtle meanings in context. Yao (2019) also demonstrated that a frame-oriented approach to vocabulary teaching played a role in Chinese peacekeeping officers' English vocabulary learning.

Frame semantics was operationally integrated into the vocabulary materials used in the current study through structured semantic mapping, in which target words were arranged thematically (e.g., Food & Drinks, Objects, and Daily Activities). Each frame was designed to elicit relevant conceptual domains and situation-specific contexts. To explain, the "food" frame included not only lexical items (e.g., noodle, pizza, milk) but also related actions (eat, drink) and environmental objects (spoon, knife, glass), allowing students to learn word relationships instead of rote memorization. During play-based activities, for example, when playing games around themes, students were repeatedly challenged to produce vocabulary items placed within these frames that provided the necessary syntactic support for students to acquire and commit vocabulary items integrated into semantic networks that could promote long-term memory and contextually appropriate use (Esbrí-Blasco, 2014).

Frame semantics aligns well with play-based learning environments, where students engage in role-play, situational tasks, and thematic games. These activities naturally create semantic frames, such as "shopping," "classroom," or "farm," in which students encounter and practice vocabulary in relevant clusters. For multilingual young students, frame semantics offer cognitive support by linking new English words to familiar concepts, facilitating retention and meaningful use.

2.4 Integrated Conceptual Framework

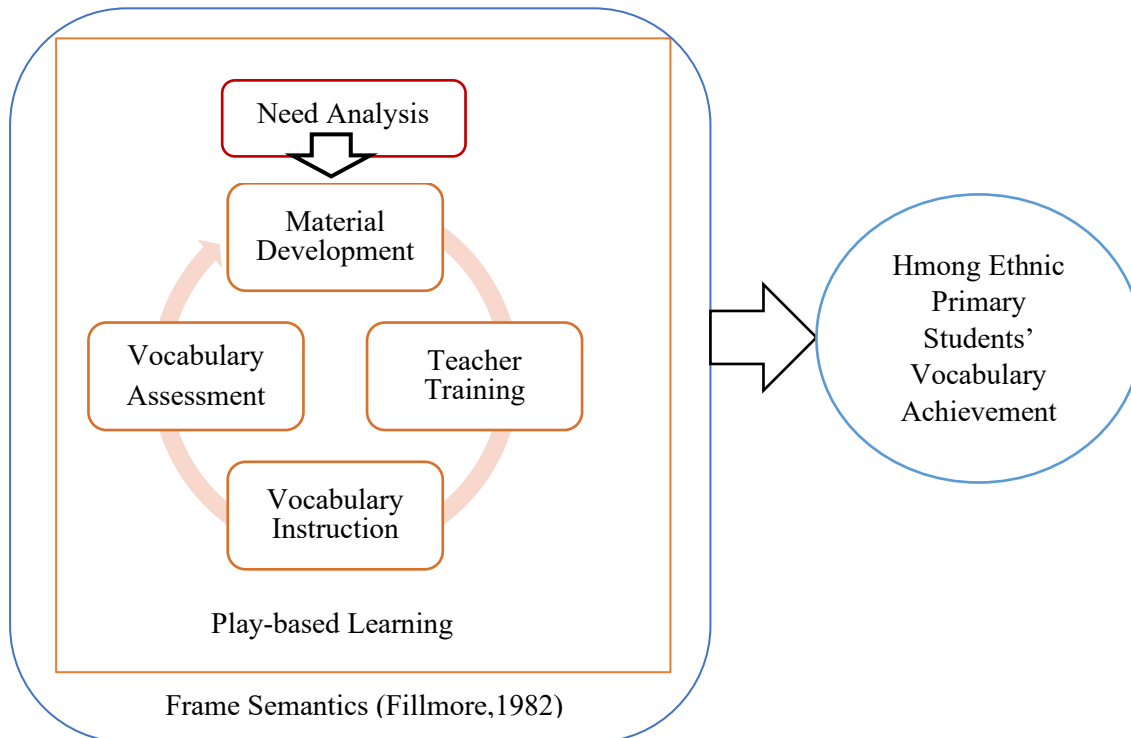
A review of the literature reveals three significant principles for the present study. First, play-based learning increases engagement, motivation, and long-term retention, particularly in resource-limited contexts and among young students who need meaningful, low-anxiety interaction. Secondly, aligned with Fillmore's (1982) frame semantics, EFL vocabulary acquisition for young multilingual students conceptualizes words as embodied concepts linked by situational or conceptual frames; activating those frames requires contextualized, repetitive, interest-based input that can be provided naturally through play or games. Lastly, frame semantics (Fillmore, 1982) offers a systematic framework for designing vocabulary materials that present words in coherent, meaningful contexts, making them more accessible for young students and easier for non-specialist teachers to implement.

Based on these principles, play-based learning aligns with frame semantics to activate Hmong primary students' vocabulary learning potential in appropriate, contextually meaningful ways. To conduct the study, a needs analysis is first conducted to identify the specific requirements of both teachers and students to enhance students' English vocabulary achievement. This step establishes initial research planning, creating a cycle for improving the present study (Plan-Do-Check-Act). Then, the findings of the needs analysis inform the development of instructional materials and learning activities (Do), including teacher training sessions and vocabulary instruction designed to operationalize the framework. The research procedures follow a systematic sequence, starting with a needs analysis of teachers and Hmong primary students (Grades 1-3), followed by a review of relevant literature and the development

of the research proposal, including research instruments. Subsequently, vocabulary assessments are used to evaluate the effectiveness of the materials, teacher training, and instructional processes (Check). The evaluation results inform revisions, improvements, and adjustments to both instructional materials and implementation processes (Act). Meanwhile, the output shows an improvement in the vocabulary achievement of Hmong ethnic primary students. Together, these steps formulate a conceptual framework of the present study, as illustrated in Figure 1.

Figure 1

Conceptual Framework of the Present Study



3. Methodology

3.1 Research Design

This study employed a mixed-methods research design, combining quantitative analysis of Hmong students' vocabulary achievement with qualitative descriptions of teachers' and students' perceptions toward the implementation of the developed instruments. In particular, a one-group pre-test-post-test design was used to measure positive learning gains in the English vocabulary performance of target students associated with play-based learning. This design is appropriate when conducting exploratory research in constrained contexts, such as this present study. However, it has shortcomings in terms of internal validity due to possible confounds such as testing effects (e.g., practice effects resulting from pre-test sensitization (Wasanasomsithi, 2005)), maturation (e.g., the natural improvement of skills over time between pre-test and post-test), and teacher variables (i.e., differences in teaching delivery owing to the teacher's individual characteristics and moods (Dörnyei, 2005)). As such, all causal inferences regarding the efficacy of this intervention must be considered tentative, as these confounds may overestimate any benefit observed (Campbell & Stanley, 1963).

3.2 Population and Sample Groups

The population comprised seven primary Border Patrol Police School teachers and Hmong ethnic primary students (Grades 1-3) at a learning center of a Thai Border Patrol Police School in northern Thailand. The whole population from this one school was divided into two groups according to the research procedure: (1) seven teachers who participated in a play-based training session along with one teacher who facilitated the class in the main study, and (2) 29 students in Grades 1-3. Regarding the students' demographic data, their ages ranged from 6 to 9 years ($M = 7.58$). At home, the students primarily spoke the indigenous Hmong language with their parents, while Central Thai and Hmong language were used with friends and some teachers at school. For some students, Hmong served as their first language and Central Thai as their second, depending on context and frequency of use. It is noted that English was taught to them as a third language and as a foreign language at school.

Since the present study was conducted at a single site and with a small sample size, these findings were context-specific and should be considered exploratory. The findings could not thus be taken as representative of all ethnic minority learners in Thailand. Instead, these findings offered preliminary insights into the effects of a play-based, frame-informed approach in similarly resource-constrained contexts. Further investigation with larger and heterogeneous samples across multiple sites is needed to confirm and generalize these findings.

3.3 Research Method

3.3.1. Participant Grouping

Two participant groups were included in the study. The first group comprised all teachers responsible for teaching at the primary Border Patrol Police School. All teachers voluntarily participated in the training session, as they might assume substitute teaching roles in English class when needed. Among them, one English subject teacher was specifically responsible for instructing students in Grades 1-3. Prior to data collection, these teachers participated in a six-hour training session focused on vocabulary instruction grounded in frame semantics and play-based learning principles. The second group consisted of 29 Hmong ethnic primary students in Grades 1-3.

3.3.2. Research Procedures

The research procedures followed a systematic sequence starting with a needs analysis comprising teacher focus-group interviews with Hmong ethnic primary students (Grades 1-3) to elicit beliefs about English teaching, preferred learning styles, and motivational factors, followed by a review of relevant literature and the development of the research proposal, including research instruments. Subsequently, the research instruments were developed and validated by a panel of experts and pilot-tested. This study was then presented for ethics review and approved by the Human Research Ethics Committee of the University of Phayao (COA No. HREC-UP-HSS 2.3/001/68).

Before the main study commenced, a six-hour teacher training session was offered to teachers, aiming to equip them with the knowledge and skills required to implement frame-semantics and play-based instruction and to use its instructional materials. This participation also facilitated their confidence and readiness to implement the developed materials in the classroom. In this regard, teachers were recruited and given orientation on the study objectives. The session was facilitated by experts in EFL instruction and assessment, who discussed the

use of instructional materials developed by the researchers. During the session, teacher participants were asked to demonstrate instruction using the developed materials by role-playing as an English teacher and Hmong ethnic primary students. The aims of this role-play task were to simulate a realistic classroom situation in practice to get familiar with the materials, anticipate potential challenges, and reflect on how to engage young students in an enjoyable manner. In doing so, the approach yielded deeper insights into how play-based, frame-informed activities operated in authentic instructional settings. Meanwhile, the researchers and training-session experts observed and monitored the overall progress and evaluated the teachers' implementation of the instructional approach. The overall results from the training session revealed that teachers exhibited a high level of capability in implementing the play-based learning approach in classroom practice.

At the end of the session, teachers completed a questionnaire on perceptions of the developed materials and training sessions, as well as professional support needs for English instruction, and participated in an interview regarding the implementation of the developed materials and instructional procedures. They were also asked to give feedback on the training session. Following the training, the English teacher ($n = 1$) implemented the instructional model in the classroom, evaluated perceptions of the instructional process and materials, shared attitudes toward the use of the intervention via an interview, and was observed and assessed by the researchers through weekly video recordings.

In the main study, a teacher used the developed materials and recorded the instructions. Meanwhile, the Hmong students ($N = 29$) completed a pre-test, received 11 lessons of vocabulary instruction from a trained teacher over 11 weeks, used the developed materials, and then completed a post-test. Finally, assessments of teachers' and students' perceptions were conducted, including interviews about the instructional process and materials. The research procedure lasted 14 weeks.

3.4 Research Instruments

3.4.1 Development of Instruments

The research instruments were developed in accordance with the objectives of the study. The steps are as follows:

(1) Literature on frame semantics and its applications to vocabulary grouping were reviewed. These semantic frames served as a foundation for designing instructional topics aligned with play-based learning activities. For example, the words *head*, *hair*, *neck*, and *eyes* were grouped under the "Body Parts" frame, allowing students to encounter them within a coherent experiential context. Based on this, the principles of play-based learning were examined to provide guidance on designing developmentally appropriate and engaging activities that addressed each semantic frame. Accordingly, play-based tasks were created to correspond with the instructional topics. For example, the "Touch and Tell" activity in the "Body Parts" frame promoted psychomotor skills, immediate feedback, and hands-on engagement.

(2) Vocabulary and grammar items featured in the National Test (NT) examinations of Thailand at the A1 level of CEFR were identified and compiled.

(3) The researchers first analyzed the selected vocabulary and grammar items to create 11-week lessons and teaching materials. These materials were developed in line with the study's time constraints and the vocabulary domains specified in the conceptual framework.

Instructional content was then systematically sequenced, progressing from simple to complex and from familiar, context-based topics to less familiar and more abstract ones.

(4) The instruments were then developed. They were categorized into three types with purpose and details as illustrated in Table 1.

Table 1

Types and Details of Instruments Developed for the Present Study

Instrument	Purpose	Details		
		Duration of Use	Participant	Description/ Feature
Type 1: Research instruments that were used to gather data				
1.1 Pre-test and post-test on English vocabulary	To assess the students' achievement in English vocabulary	Main study	Students	Ten-item-picture matching pre-test and post-test
1.2 A questionnaire for students	To investigate the students' perceptions toward the use of developed materials in enhancing English vocabulary	Main study	Students	A three-item, five-point Likert-scale questionnaire adapted for young learners, with response options represented through five emoji icons with a scale (from "1 = Disagree" to "5 = Strongly Agree")
1.3 A questionnaire for teachers	To investigate the teachers' perceptions toward the use of developed materials in enhancing students' English vocabulary and their professional support needs for English instruction	Training session and main study	Teachers	- A five-point-Likert-scale' questionnaire with the first-five items investigating teachers' perceptions with scales (from "1 = Disagree" to "5 = Strongly Agree"). - A five-point-Likert-scale' questionnaire with three items investigating teachers' perceptions toward professional support needs for English instruction with scales (from

Instrument	Purpose	Details		
		Duration of Use	Participant	Description/ Feature
1.4 Semi-structured interview form for students	To explore students' perceptions toward the play-based approach and the developed materials	Main study	Students	<p>“1 = Low Need” to “5 = Very High Need”)</p> <ul style="list-style-type: none"> - A three-item semi-structured interview protocol - Focus-group interview - Conducted in the Thai language
1.5 Semi-structured interview form for teachers	To explore teachers' perceptions toward the play-based approach, developed materials, perceptions toward supporting resources, and suggestions for improvement	Training session and main study	Teachers	<ul style="list-style-type: none"> - A nine-item semi-structured interview protocol - Focus-group interview - Conducted in the Thai language
Type 2: Intervention materials that were used to deliver the play-based vocabulary lessons				
2.1 Teacher's manual for play-based materials	To guide teachers in implementing the play-based materials	Training session and main study	Teacher	Guidelines for implementing play-based learning materials throughout 11 weeks of instruction
2.2 Lesson plan based on play-based learning	To structure classroom sessions around play-based learning	Training session and main study	Teacher	The 11 weekly units aligned with the 11 conceptual-frame vocabulary categories featuring objectives, phases of instruction, and detailed materials lists (see Appendix A)
2.3 Word list for flash card based on frame semantics	To provide a list of semantically framed vocabulary for flash-card creation	Training session and main study	Teacher	Frame-semantic vocabulary items grouped into 11 categories organized by conceptual frames

Instrument	Purpose	Details		
		Duration of Use	Participant	Description/ Feature
2.4 Flash cards	To aid students in memorizing target words through visual cues	Training session and main study	Teacher and students	The colorful cards, created for 11 lessons, included a picture, the target word, its transcription, and the Thai meaning
2.5 Exercise book for vocabulary revision	To offer practice exercises that reinforce learned vocabulary	Training session and main study	Students	The exercises that were developed based on 11-lesson vocabulary instruction from the lesson plan
Type 3: Data-collection instruments that were used to record and assess implementation				
3.1 Evaluation form for teachers' perceptions toward the training session	To gauge teachers' perceptions toward the training session	Training session	Teachers	A five-point Likert scale to measure teachers' levels of agreement or satisfaction, together with open-ended questions for additional comments and suggestions
3.2 Teacher's observation note	To document in-class implementation details	Main study	Teacher	- The 'Yes/No' checklists with comments and rationale to record students' reactions and performance in each stage, along with overall lesson observations - A record of five learning stages: warm-up, presentation, practice, production, and wrap-up/review, focusing on students' readiness, participation, understanding, vocabulary use,

Instrument	Purpose	Details		
		Duration of Use	Participant	Description/ Feature
				recall, and enjoyment

3.4.2 Instrument Quality Assurance

The quality of the instruments was verified through expert validation and reliability testing. Three experts with over five years of experience in English language and linguistics, EFL instruction and assessment, and teaching English to young Thai learners evaluated the content accuracy and relevance of each item to determine the Item-Objective Congruence (IOC) index. Items that resulted in scores below 0.50 were modified according to the recommendations provided. Regarding the research instruments, all test items achieved IOC values above the satisfactory cut-off of 0.5, whereas the IOC results for the questionnaires and interview protocols ranged from 0.60 to 1.00, indicating expert agreement on the items' congruence with the research objective. In terms of the data collection instruments, the IOC results for all instruments ranged from 0.6 to 1.0, indicating consistent expert agreement on their alignment with the research objectives. Following revision, the instruments were piloted and finalized for data collection.

After piloting the research instruments, the pre- and post-test results from six Hmong primary students with characteristics comparable to those of the actual study participants were investigated. Wilcoxon signed-rank test was conducted to examine whether the developed tests could detect score changes in the piloting group. The results demonstrated that Wilcoxon signed-rank test revealed a significant increase in post-test scores relative to pre-test scores, $Z = 2.222$, $p = .026$, with a very large effect size ($r_{(c)} = 1.00$), suggesting that the play-based frame-informed approach was highly effective in improving students' English vocabulary during the pilot study. All in all, the results indicated that the instruments could capture positive changes in students' vocabulary achievement and were therefore appropriate for use in the main study.

3.5 Data Collection

In the main study, all participants were invited to an orientation session in which the research objective, procedures, and participation requirements were fully explained. After that, a trained teacher ($n = 1$) administered a pre-test to the Hmong primary students ($N = 29$) to estimate their vocabulary knowledge before the intervention. During the intervention, data were collected using a structured set of instruments. Teacher implemented the lessons using the teacher's manual for play-based materials, which provided step-by-step guidance for delivering activities and integrating play into vocabulary instruction. Each session followed the play-based lesson plans to adhere to the objective of the present study. Meanwhile, students engaged with English vocabulary through games and materials, such as flashcards used during teaching activities, including matching games and rapid-response tasks. Students also practiced using the exercise book containing tasks for vocabulary revision to consolidate learning and practice with target words beyond interactive play. Teacher also used flash cards for repeated exposure and immediate practice in the instruction. During the intervention, the teacher used observation notes to record classroom processes, students' involvement, and any teaching

challenges. These notes were also a form of qualitative evidence of how the instructional intervention worked in actual classroom practice and how students responded to the developed materials and tasks. To ensure the fidelity of the intervention, teacher was requested to record each teaching session and submit the video files to the researchers. These recordings allowed the researchers to observe and assess instructional practices, provide timely feedback, and offer additional assistance when any problems arose. This remote observation method helped reduce the supervision gap caused by geographical distance and ensured continuous support throughout the intervention.

Following the instructional period, the post-test was administered to students to measure their vocabulary learning improvement. Additional data were then collected through teachers' and students' perception questionnaires and interviews.

3.6 Data Analysis

Data analysis was conducted according to the type of instrument used in the "Type 1: Research instruments" as follows. For the quantitative data, pre- and post-test scores were analyzed using the mean (M), standard deviation (SD), and Wilcoxon signed-rank test to determine statistically significant differences between pre- and post-achievement because of a small sample size ($n < 30$). Together, this study reported matched-pairs rank-biserial correlation ($r(c)$) alongside Wilcoxon signed-rank tests to quantify the magnitude of the pre- and post-test effects on r non-normally distributed, paired vocabulary scores. This nonparametric effect size is appropriate for ordinal data and supports the interpretation of the effects of the integrated frame semantics and play-based learning approach, which can be classified using thresholds of small ($r(c) \geq 0.11$), medium ($r(c) \geq 0.28$), or large ($r(c) \geq 0.43$) (Fiel Peres, 2026). In addition to the qualitative information, data from the students' and teachers' perception questionnaires were analyzed using mean scores and SDs derived from the five-point Likert scale. To triangulate the data, teacher and student interviews were analyzed using content analysis to identify emerging themes related to perceptions of the instructional approach and materials.

4. Findings

4.1 Effects of Play-based Learning on English Vocabulary Achievement of Hmong Ethnic Primary Students

Wilcoxon signed-rank test was conducted to compare the students' scores before and after the intervention gained from the main study, as displayed in Table 2.

Table 2

Results of Pre- and Post-test Scores of the Main Study

Test	n	M	SD	Wilcoxon Signed-rank Test		Effect Size
				Z	p (2-tailed)	r(c)
Pre-test	29	4.24	2.17			
Post-test	29	7.69	1.97	-4.495	.000***	.52

*** $p < .001$

Table 2 shows a significant improvement in students' vocabulary achievement following the implementation of the play-based, frame-informed approach. A total of 29 students participated in the main study. The mean pre-test score was 4.24 (SD = 2.17), while the mean post-test score increased to 7.69 (SD = 1.97), indicating notable gains in students' vocabulary performance following the intervention. Their post-test vocabulary scores were significantly higher than their pre-test scores ($Z = -4.495, p < .001, r_{(c)} = .52$). Most students scored higher on the post-test, with 26 positive ranks, one negative rank, and two ties. This large effect size corresponds to substantial practical improvement, where 52% more ranks favor post-test gains, demonstrating the strong impact of the play-based frame-informed approach.

4.2 Findings from the Questionnaires

To obtain valuable insights into participants' attitudes toward the developed materials and frame-semantics-based vocabulary instruction, perception questionnaires were administered. The questionnaire in the Thai language was a three-item, five-point Likert scale with five response options to assess how students and teachers felt about the materials designed for learning English vocabulary. The results of the questionnaire for students and teachers are presented in Tables 3-5, respectively.

Table 3

Students' Perceptions Toward the Developed Play-based Materials and Activities (N = 29)

No.	Statement	Min	Max	<i>M</i>	<i>SD</i>	Interpretation
1.	Helpfulness of pictures in the book for vocabulary memorization	1	5	4.06	1.16	Agree
2.	Effectiveness of classroom activities for learning engagement	3	5	4.27	0.75	Strongly agree
3.	Feeling of improved English abilities	1	5	3.65	0.94	Agree
Grand mean score				4.00	0.95	Satisfied

In Table 3, students expressed the highest level of agreement with statements indicating that play-based activities enhanced their engagement in learning English ($M = 4.27; SD = 0.75$). However, their perceived improvement in English skills was in the "Agree" range, with a mean score just above neutral ($M = 3.65; SD = 0.94$). This discrepancy suggests that, while students found the activities pleasurable and motivating, they might not have recognized their own language growth as much as they had hoped, either because of the study's relatively short intervention period or because of the absence of explicit performance benchmarks to help them judge their progress. Overall, students were satisfied with the developed materials ($M = 4.00; SD = 0.95$), indicating that the intervention was well received despite low perceived improvement in skills.

Table 4*Teachers' Perceptions Toward the Developed Play-based Materials and Activities (N = 7)*

No.	Statement	Min	Max	M	SD	Interpretation
1.	Adequacy of materials	4	5	4.78	0.44	Strongly Agree
2.	Effectiveness of guidance and support from the research team	4	5	4.78	0.44	Strongly Agree
3.	Increased confidence in using the approach	4	5	4.67	0.50	Strongly Agree
4.	Effectiveness in implementing the approach in the English classroom	4	5	4.89	0.33	Strongly Agree
5.	Student enthusiasm and engagement during the lessons	4	5	4.67	0.50	Strongly Agree
Grand mean score				4.76	0.44	Strongly Agree

According to Table 4, the teacher responses indicate perceptions toward the developed materials and the overall play-based instructional approach. They strongly agreed that the instructional materials were adequate for use in class ($M = 4.78$; $SD = 0.44$) and that they received enough guidance and support ($M = 4.78$; $SD = 0.44$). Teachers also reported increased confidence in using a frame-semantics-informed and play-based approach ($M = 4.67$; $SD = 0.50$) and felt highly effective in implementing these activities in class ($M = 4.89$; $SD = 0.33$). Additionally, they strongly agreed that students showed greater enthusiasm and engagement ($M = 4.67$; $SD = 0.50$).

Table 5*Teachers' Perceptions Toward Professional Support Needs for English Instruction (N = 7)*

No.	Statement	Min	Max	M	SD	Interpretation
1.	Need for additional training	5	5	5.00	0.00	Very High Need
2.	Need for additional school support	4	5	4.44	0.53	Very High Need
3.	Need for improving integrated English instruction	5	5	5.00	0.00	Very High Need
Grand mean score				4.81	0.18	Very High Need

Notably, all seven respondents ($N = 7$) were classroom teachers who, in addition to their primary subject assignments, served as substitute English teachers. Consequently, all of them regarded English instruction as one of the high priorities when completing the questionnaire. Table 5 reports teachers' ratings of their professional-support needs on a 5-point Likert scale from "1 = No need at all" to "5 = Very High Need." Teachers agreed broadly ($M = 5.00$, $SD = 0.00$) on the necessity for more in-service training, indicating that current training opportunities did not equip them to teach English effectively. They also signaled strong demand ($M = 4.44$, $SD = 0.53$) for more support at the school level, such as English-focused

teaching materials. Lastly, teachers found a general improvement in integrated English instruction to be equally important to their practice ($M = 5.00$, $SD = 0.00$), indicating that regardless of the subject they primarily teach, they recognized English language pedagogy as fundamental to promoting overall student outcomes.

4.3 Findings from the Interview

The qualitative findings from the interviews and teachers' observation notes were triangulated to support and enrich the quantitative results. Notably, the teachers' observation notes were also analyzed to capture classroom behaviors and students' responses to the developed materials and activities, thereby providing additional qualitative evidence.

4.3.1. Students' attitudes and perceptions toward play-based learning materials and instruction

Enhancement of the English vocabulary

Most students reported that the developed materials and classroom activities supported their vocabulary learning and retention because the visual elements helped them remember the target words more easily.

"I like the colorful pictures in the book. I can remember English vocabulary when I see them." (Student 5)

"Teacher has me pick up the flashcard, and I can remember English vocabulary from the picture on it." (Student 11)

"I like to sing the "Head, Shoulders, Knees, and Toes" song because it's fun, and I can tell others the words for our body parts." (Student 24)

Moreover, the teacher's notes further confirmed the usefulness of the developed materials and classroom activities in helping students remember the target English words.

"After showing the picture, students can promptly answer, spell, and pronounce the word correctly. Meaningful pictures help students memorize vocabulary more effectively." (Teacher 1)

Enjoyment of the classroom activities

Many students expressed enthusiasm for the play-based components, describing the lessons as enjoyable.

"It's fun." (Student 2)

"I like the snake ladder game because I get to roll the dice." (Student 8)

"I like to sing a song, run in the class to find the pictures, and match them with words." (Student 20)

Furthermore, a few students mentioned that the enjoyment factor encouraged their willingness to use English.

"I feel very confident using English because the games and activities are fun." (Student 25)

Besides, play-based activities were highly enjoyed by students, according to teacher notes. Students were visibly active while performing the tasks.

“Students are excited the moment they see me walk into the English class with materials. Every time a group wins, they just smile and clap, and the entire room is filled with laughter and joy.” (Teacher 1)

Positive attitudes toward the English subject

In addition, students showed more favorable attitudes toward learning English. Some associated the learning experience with improved proficiency.

“I like English very much.” (Student 4)

“I feel that my English is better.” (Student 13)

A few also connected English learning to future ambitions.

“I can use English for working abroad when I grow up like some adults in the village.” (Student 28)

To sum up, these findings indicate that the developed materials and instructions not only facilitated vocabulary acquisition but also positively influenced students’ affective responses to learning English.

4.3.2. Teachers’ attitudes and perceptions toward play-based learning materials and instruction

The findings from teachers’ data are presented in two main sections: positive attitudes and experiences, and limitations and challenges encountered during implementation as follows.

Positive attitudes and experiences

Teachers were satisfied with the implementation of the developed materials and play-based instruction. This teaching approach enhanced classroom dynamics since the materials were flexible and adaptable across classes and subjects, which enabled collaboration with colleagues.

“I can share the activity materials with teachers who teach other classes and subjects such as English for Grade 4–6, Thai, and math.” (Teacher 1)

“I like that the materials can be shared with other teachers. It helps the whole school improve, not just one class.” (Teacher 5)

Teachers also reported gaining confidence in designing new instructional activities inspired by the play-based approach.

“I also created my new game for a play-based activity, for example, a café role play by acting as customers and a coffee shop staff to teach vocabulary in the soft drink topic.” (Teacher 1)

Moreover, teacher observed noticeable improvements in student motivation after the intervention.

“The students like games, so they are happier when studying English.” (Teacher 1)

Furthermore, teacher noticed that play-based tasks decreased classroom anxiety but promoted their confidence.

“When we play the games, the students don’t feel afraid of speaking English. They feel part of it because they believe it’s just an entertaining game, not a test.” (Teacher 1)

Finally, teacher observed increased peer interaction among students during the intervention.

“When we did the play-based activities, students interacted a lot more. The room simply felt more positive.” (Teacher 1)

Interestingly, some teachers said the play-based approach, as well as those materials, could help address educational gaps in small rural schools like theirs.

“I believe that play-based activities can help students learn more fairly, even in a small school like ours.” (Teacher 3)

“I feel like these activities give our Hmong students the same opportunity to learn English as those at schools in the city.” (Teacher 4)

Limitations and challenges of play-based learning in the Hmong classes

Although the attitude was positive and satisfaction was high, teachers identified some limitations and faced challenges during implementation.

“I love the materials, but preparing them is time-consuming.” (Teacher 6)

“Not every student joins in. A few of them don’t talk much during the games.” (Teacher 1)

“Sometimes the class is a little hard to manage when everyone gets really excited. Certain games can be quite loud, and it is hard to keep every student focused on learning.” (Teacher 1)

“I find it difficult to monitor each student for English proficiency because they’re all moving and talking at the same time.” (Teacher 1)

To conclude, teachers had positive perceptions toward the materials and instruction developed and reported that student motivation, confidence in speaking, and peer interaction had all been enhanced. Play-based learning likewise promoted cross-subject flexibility and prompted teachers to develop new activities. Teachers also emphasized how the developed material and instructional approach could potentially address educational inequalities in deprived schools. However, despite the advantages, some limitations and challenges were also addressed, such as the time needed for preparation, inconsistent participation of both teacher-

led and child-initiated, classroom management issues, and difficulty assessing individual learners during play-based tasks.

5. Discussion

The specific context of the present study is important to note, that is, Hmong primary students at a remote border-patrol-police school in northern Thailand are geographically isolated, have experienced limited access to English and instruction taught by teachers who have low levels of EFL training. These limitations have resulted in persistently unsatisfactory vocabulary attainment, continued literacy challenges, and discouraging perceptions toward English classes among these underserved students. The findings of this study indicated that, in this challenging context, play-based learning combined with frame-semantic-informed materials increased Hmong primary students' English vocabulary achievement following the 11-week intervention. Furthermore, questionnaire and interview data confirmed that students' and teachers' perceptions of the materials and the approach were very positive. These findings are similar to those of other studies, which found play-based pedagogy could effectively enhance students' English language development and overall academic performance. For instance, Cheep-Aranai (2016) found improvements in the oral expression of Thai third-grade EFL learners after being taught through play-based activities. These similar effects were reported by Urado and Marquez (2025), in which academic and behavioral growth was evident in kindergartens implementing play-based teaching strategies. Additionally, positive attitudes reported in this study align with earlier findings. Cheep-Aranai (2016) reported that young EFL learners liked play-based tasks and observed social interaction among students. Cheep-Aranai et al. (2015) also found a high level of enthusiasm among Thai students engaging in play-based learning activities, and Misna and Pamungkas (2025) noted positive reactions to contextual play-based approaches from learners who are developing or challenged in their literacy ability. These findings suggested that a play-based materials approach grounded in frame semantics could help overcome linguistic, pedagogical, and resource constraints faced by ethnic minority students in Thailand.

A plausible explanation for these gains lies in the combination of frame semantics and a play-based learning approach as the study's underpinning theoretical framework. Frame-semantic vocabulary instruction enabled students to learn words within coherent, experience-based contexts rather than as isolated items, supporting deeper understanding and retention. These findings align with previous studies showing that semantic-frame structures assisted EFL learners in establishing strong lexical networks and enhancing long-term recall (Xu & Li, 2011; Dalpanagioti, 2023). At the same time, play-based activities contributed to an interactive and stress-free environment conducive to participation, motivation, and repeated practice, which are the building blocks of vocabulary learning among young learners (Cheep-Aranai, 2016; Yang & Charubusp, 2023).

When a frame-semantic and play-based approach was employed in the creation of vocabulary materials, instruction became meaningful and enjoyable for students while also supporting word retention. Frame semantics enabled students to acquire vocabulary in meaningful, experience-related contexts and thereby supported deeper lexical learning. The play-based activities, in turn, consolidated these frames through hands-on practice, repetition, and a low-stress environment, which were found to increase motivation and vocabulary retention among young EFL learners (Cheep-Aranai, 2016; Nair et al., 2025). Thus, the

combination of meaningful semantic organization and playful interaction offered both cognitive and emotional support for vocabulary development.

In addition to this progress in students' vocabulary attainment, the results of this study reflect on students' and teachers' preferences toward developed materials. For students, the intervention supported vocabulary acquisition and improved the affective domains in their English learning. In other words, the developed materials helped students learn the words in meaningful contexts and through enjoyable activities, which would have influenced their confidence and positive attitude toward English. These findings support previous studies, which demonstrated that contextualized vocabulary input, among other areas, prompts greater retention and comprehension, as well as the notion that play-based methods facilitate enjoyment, lower anxiety, and promote high levels of engagement in younger language learners (Cheep-Aranai, 2016; Nair et al., 2025). These findings suggested that when meaningful semantic organization was combined with play-based interaction, students benefited both cognitively and affectively, acquiring not only vocabulary knowledge but also motivation and a sense of purpose in learning English. Nonetheless, the level of improvement in English was perceived by students as neutral ($M = 3.65$), as illustrated in Table 3, despite their high enjoyment and engagement. Some studies (e.g., Flavell, 1979; Schneider & Pressley, 1997) have suggested that young children are still developing the metacognitive skills needed to self-monitor and accurately evaluate their learning. Without explicit performance benchmarks or feedback, young learners tend to gauge their success by how enjoyable the experience was. In this study, the short duration of the intervention and the lack of systematic self-assessment tools (e.g., pictorial checklists, guided reflection prompts) likely contributed to at least some degree of metacognitive difficulty, as evidenced by a moderate mean score ($M = 3.65$). Regarding teachers' perceptions, the findings of the present study indicated that teachers were satisfied with the developed materials. They highlighted enhanced students' motivation, engagement, and classroom management benefits, similar to the observed improvements in confidence, peer interaction, and instructional flexibility. Such alignment also applies to the potential for addressing educational disparities, given that kindergarteners tend to favor play-based learning as a way of reducing educational inequalities, as Nugent (2017) documented kindergarten teachers' endorsement of play-based learning for fostering inclusive academic and functional values in diverse settings.

However, the qualitative findings in this study show several challenges in implementing play-based learning for Hmong ethnic students. Firstly, teachers reported that material preparation was often time-consuming. This is possibly due to the need to spend more time reviewing research and adapting culturally specific, engaging materials for an ethnic group such as Hmong students, compared with play resources in general. McDaniel (2024) noted that play-based activities are often time-consuming to prepare as teachers must design, resource, and organize materials, and that this planning demand could be an obstacle in heavily timetabled EFL curricula. Furthermore, the lack of participation in both child-initiated and teacher-led activities is discussed. This may be due to the novelty of the approach for both teachers and students, leading to a phase in which responsibilities and expectations are being settled. Previous studies (e.g., Tsai, 2017) have found that teachers, particularly novice adopters of play-based pedagogy, tend to struggle to strike the right balance between guiding activities and allowing for child-initiated exploration, which could affect consistent engagement. Moreover, classroom management concerns emerged. This is because the

interactive nature of play-based activities is exciting; however, for younger students, could tend to get noisy and off-task (Pyle & Bigelow, 2015). Lastly, teachers encountered challenges assessing individual performance during collaborative play. This made it difficult to track each student's advancement and give tailored feedback like Pyle and Danniels (2017) noted monitoring individual learning outcomes in group-based, unstructured play environments would require an advanced level of observational ability and professional assessment tools which may not be readily available to teachers, going beyond traditional test-based forms of evaluation.

Crucially, the findings indicate that play-based with frame-informed materials might help minimize education inequality in rural, multilingual communities such as remote Hmong border schools. By providing accessible, low-resource instructional tools that support meaningful learning, the approach met the goals of SDG 4 by promoting equitable, quality education for marginalized groups. This is because the developed materials as well as the proposed teaching approach required minimal technology, encouraged active learning, and helped bridge gaps faced by students with limited exposure to formal English instruction.

6. Implications

The findings of this study support the claim that play-based learning positively contributes to Hmong primary students' English vocabulary and could be effectively implemented in underserved schools, especially in multilingual settings with limited resources. Nonetheless, play-based instruction is only effective with the teacher's hands-on effort and creativity, as it requires active mediation to increase motivation, build vocabulary knowledge, and ensure a low-anxiety-filled classroom. In this regard, active teachers must be able to turn play-based activities into lessons and manage classrooms effectively, so that students can communicate and learn from one another. Consequently, professional development through targeted training or workshops is essential to support teachers in developing these competencies. As noted, teachers in the current study received training prior to the intervention on how to facilitate interactions, modify materials, and manage energetic classrooms. The training also enhanced confidence, fostered their creativity in developing materials and activities for vocabulary instruction, and facilitated the integration of engaging methods into everyday practice.

7. Limitations and Recommendations for Future Research

One of the key limitations of this study concerns the geographical distance between researchers and a participating rural school. Since the classroom implementation took place in a remote location, data on the teacher's fidelity in implementing the research instruments were collected through weekly video recordings rather than real-time observation. This limitation may have hindered the researchers' ability to respond immediately because it occurred during instruction and may have affected the intervention-fidelity support. A second constraint is the cultural appropriateness of play-based learning in the local Hmong context. Certain activities may not align with Hmong students' home expectations regarding the notion of "seriously studying," so their parents may perceive some categories as not constituting serious study. Such views may affect how parents judge the usefulness of play-based learning, which in turn may shape the attitudes that students carry into their learning outside the classroom.

Based on the study findings and limitations, the following recommendations could be made:

1. Future research should consider hybrid supervision models that include video reporting but add live visits or synchronous virtual coaching. This method might improve the accuracy of monitoring and provide teachers with more timely instructional support.
2. Research and practice need to develop culturally responsive play-based activities that better reflect local norms, community practices, and parental expectations. Incorporating familiar cultural elements may foster community acceptance and create stronger links among home, school, and community.
3. Future studies should extend the scope of participants to include other groups of underserved young learners such as ethnic minority children in different regions of Thailand, students in urban substandard-housing communities, or migrant learners, to examine whether a play-based approach with a frame-informed approach yields similar benefits across varied sociocultural and educational contexts.

8. Conclusion

This study demonstrates that integrating frame-semantics-based with play-based learning could enhance English vocabulary development among Hmong primary students in a rural, underserved school setting. The inclusive program using the aforementioned approaches was implemented after teacher training and conducted in English classrooms over a duration of 11 weeks. On the one hand, the quantitative results revealed that students' vocabulary scores increased significantly; on the other hand, the qualitative data suggested high motivation among students, lower anxiety in class, and more peer interaction during learning. Teachers also reported highly positive perceptions of the materials developed, noting that they were flexible, could work across subject areas, and had the potential to improve equitable learning opportunities for remote rural students. However, some challenges were identified, including time-consuming material preparation, classroom management concerns, and difficulties assessing individual performance during play-based tasks. The important factors contributing to the success of the intervention were not only the materials tailored for the main study, but also the teacher's role as a facilitator, which helped establish an encouraging classroom environment and enabled students to engage more confidently with English. Moreover, the flexibility and adaptability of the materials allowed for use across subjects, suggesting additional benefits for teachers working in small, underserved schools. In sum, the findings of this study begin to provide empirical support for a promising, contextually relevant instructional model for remote educational settings that promotes more inclusive educational development with respect to SDG 4.

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11. Declaration of AI Use

The authors declared that AI tools, including ChatGPT, Grammarly, and Gemini, were used in preparing the manuscript for spell-checking, grammar correction, formatting assistance, and reference checking.

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13. Appendix

Appendix A

Details of the 11-Week Play-Based Learning Lesson Plan

Week	Topic	Objective	Situation	Material & Activity
1	Body Parts	Identify common body part vocabulary through pictures or classroom activities.	Knowing Our Body	- Flash cards - “Simon Says” game - “Touch and Tell” activity - Body parts song
2	Family Member	Identify common family member vocabulary through pictures or classroom activities.	Home Sweet Home	- Flash cards - Family Tree Puzzle - Drawing
3	Food	Identify common food vocabulary through pictures or classroom activities.	Shopping	- Flash cards - Bingo game - Role play
4	Desserts and Drinks	Identify common dessert and drink vocabulary through pictures or classroom activities.	Lunch Time	- Flash cards - Role play - Bingo game - “Taste and Guess” game
5	Fruits	Identify common fruit vocabulary through pictures or classroom activities.	Fruit Market	- Flash cards - Role play - Storytelling
6	Vegetables	Identify common vegetable vocabulary through pictures or classroom activities.	Shopping	- Flash cards - Role play - Storytelling

Week	Topic	Objective	Situation	Material & Activity
7	Animals	Identify common animal vocabulary through pictures or classroom activities.	Favorite Animals	<ul style="list-style-type: none"> - “Jump on it” game - Flash cards - Animal charades game - Drawing - Animal sorting game
8	Adjectives	Identify common adjectives through pictures or classroom activities.	How Is It?	<ul style="list-style-type: none"> - Flash cards - Describing the picture - “Opposite match” game
9	Verbs I	Use common verbs through pictures or classroom activities.	School Day	<ul style="list-style-type: none"> - Flash cards - Following the command - Storytelling - Acting out the story
10	Verbs II	Use common verbs through pictures or classroom activities.	Daily Life	<ul style="list-style-type: none"> - Flash cards - Following the command - Storytelling - Acting out the story
11	Prepositions	Use common prepositions through pictures or classroom activities.	Where Is It?	<ul style="list-style-type: none"> - Flash cards and realia - Finding the object - Storytelling - Acting it out