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Primary Students and English Learning: Issues, Obstacles, and Innovative Solutions

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ABSTRACT

This study examines the challenges faced by primary school students in learning English in Malaysian non-native contexts, with particular emphasis on the role of technology integration. It aimed to identify key learning challenges, examine the influence of technology integration on student engagement, and propose relevant instructional strategies. A cross-sectional quantitative survey design was employed, involving the use of a structured questionnaire to collect data from 252 primary school English teachers in the Kinta District, Perak. The findings indicate that students experience significant difficulties due to limited exposure to English, low motivation, and ineffective pedagogical approaches. While teachers generally perceive technology as beneficial in enhancing student engagement, disparities in access and digital readiness remain evident, particularly in rural schools. A moderate positive correlation was found between teachers' technological confidence and their perception of student engagement. Based on these findings and supported by existing literature, the study proposes innovative strategies, including gamification and AI-assisted learning tools, to enhance English language acquisition. It contributes to the field of English language teaching by offering context-specific insights and practical recommendations for improving instructional practices in Malaysian primary education.

KEYWORDS: English learning, primary education, learning challenges, technology integration, student engagement

Introduction

English proficiency is a critical skill for primary school students in non-native English-speaking contexts, despite the fact that many people struggle with language acquisition due to a lack of exposure, out-of-date education, and lack of commitment (Sikubwabo et al., 2024; Mihat, 2016). Many students are unable to implement their skills in practical situations because conventional rote-learning methods frequently fail to promote significant language acquisition (Bhattacharya, 2022). Issues like limited access to educational resources and inadequate teacher preparation further hinder the effectiveness of English instruction (Muhammad Muslim et al., 2025).

The need for English proficiency has increased from a young age due to the growing internationalization of the job market and education. However, many elementary school pupils lack the support networks they need to successfully raise their level of English proficiency. (Budiman et al., 2023). As a consequence of the disparity between academic language training and practical language application, students suffer from a lack of fluency and confidence in their language skills (Kim, 2023). Time constraints, rigid curricula, and a lack of training in modern pedagogical approaches often make it difficult for teachers to engage students.

Moreover, technology has become an integral component of education; however, its application in English language acquisition is not consistently effective. Although digital tools can significantly enhance engagement and facilitate language acquisition, numerous schools encounter obstacles such as antiquated infrastructure, inadequately trained educators, and restricted access to digital materials (Gagić et al., 2023). Incorporating innovative strategies, such as gamification, blended learning, and AI-driven coaching, could effectively address these difficulties by enhancing interaction and prioritizing student involvement (Pendy, 2023).

This study examines the primary barriers that impede elementary kids from successfully acquiring English language skills. It underscores the significance of instructional methodologies and technology in addressing these difficulties. By comprehending these challenges and applying evidence-based solutions, educators and policymakers may improve English learning experiences, ensuring that students acquire the essential skills to succeed in a progressively competitive and globalized environment.

Problem Statement

The growing importance of English as a global language brings significant challenges for young students in non-English-speaking countries as they strive to become proficient in the language (Dixon et al., 2020). These challenges include limited opportunities to use English outside of the classroom, a drop in student motivation, difficulties with grammar and vocabulary, and less effective teaching methods (Kharel, 2023). While technology has the potential to enhance English learning, many schools struggle with poor integration due to issues like outdated infrastructure and a lack of proper training for teachers (Rintaningrum, 2023). Failure to tackle these issues could hold back students' English skills, which in turn would negatively affect their academic progress, confidence, and future opportunities (Waluyo & Panmei, 2021). This study looks into the challenges faced in elementary English education and proposes innovative, tech-driven solutions aimed at boosting engagement, motivation, and overall proficiency in English for young learners.

Purpose and Objectives of the Study

The purpose of this study is to identify issues, obstacles, and innovative solutions in English learning among primary school students. Specifically, the objectives of this study are as follows:

- a. To identify the key challenges faced by primary students in learning English based on demographic factors.
- b. To examine the effects of technology integration on English language learning.
- c. To determine innovative teaching strategies, including AI-based solutions, to improve student engagement and motivation.

Research Questions

This study is guided by the following research questions:

- a. What are the key challenges faced by primary school students in learning English?
- b. How does technology integration influence student engagement in English language learning?
- c. What instructional strategies can enhance student engagement and improve English learning outcomes?

Literature Review

English language learning in primary education, particularly in non-native contexts, has been widely recognized as a complex process influenced by multiple linguistic, pedagogical, and environmental factors. In many ESL settings, young learners often encounter difficulties in acquiring proficiency due to limited exposure to authentic language use, low motivation, and ineffective instructional practices. Studies have consistently shown that insufficient opportunities for meaningful communication in English hinder the development of both linguistic competence and communicative confidence among learners (Dixon et al., 2020; Kim, 2023). Furthermore, traditional teacher-centered approaches, which emphasize rote memorization and grammar translation, continue to dominate many classrooms, thereby limiting students' active engagement in the learning process (Bhattacharya, 2022).

Previous studies have highlighted the significant role of technology and innovative pedagogical approaches in enhancing English language learning. For instance, Kamaruzaman and Sulaiman (2025) emphasized the use of digital tools and interactive strategies for improving grammar learning in ESL classrooms. Similarly, Bakir (2023) demonstrated that student-centered approaches, such as Socratic questioning techniques, can enhance learners' engagement and critical thinking skills. These findings support the importance of integrating technology and learner-centered pedagogy for improving English learning outcomes, particularly in primary education contexts.

Recent work in the Malaysian ESL context further highlights the importance of identifying teachers' needs in technology integration. Radi and Zabit (2026) found that successful integration of technology in English language teaching depends not only on access to digital tools but also on teachers' readiness, training, and institutional support. Their findings emphasize the need for a holistic approach that combines pedagogical knowledge with technological competence, particularly in primary school settings.

One of the most prominent challenges in English language learning is the issue of learner motivation. According to the Self-Determination Theory, students' intrinsic motivation plays a crucial role in sustaining engagement and promoting deeper learning (Alamer, 2022). However, in many primary school contexts, students demonstrate low interest in learning English due to a lack of relevance, limited interaction, and insufficient encouragement both within and beyond the classroom. Additionally, extramural exposure to English, such as through media or social interaction, has been identified as a significant predictor of vocabulary development and overall language proficiency (Leona et al., 2021). In contexts where such exposure is minimal, learners are often disadvantaged in developing fluency and confidence. In response to these challenges, the integration of technology in English language teaching has gained increasing attention. Digital tools, including multimedia applications, interactive platforms, and online learning environments, have been found to enhance student engagement and provide opportunities for authentic language use (Rintaningrum, 2023; Gagić et al., 2023). Technology-mediated instruction supports a more student-centered approach, allowing learners to actively participate in constructing knowledge, which aligns with the principles of the Constructivist Learning Theory (Mishra, 2023). Moreover, technology enables differentiated instructions that cater to diverse learning needs and pacing, thereby improving learning outcomes.

Recent advancements in educational technology have introduced innovative approaches, such as gamification and artificial intelligence (AI)-assisted learning. Gamification strategies, which incorporate elements such as rewards, challenges, and interactive tasks, have been shown to increase motivation and engagement among young learners (Duisenova & Zhorabekova, 2023). Similarly, AI-driven tools offer personalized learning experiences through adaptive feedback, real-time assessment, and customized learning pathways (Strielkowski et al., 2024; Lawrance et al., 2024). These tools support the Input Hypothesis by providing learners with comprehensible and level-appropriate language input, which is essential for effective language acquisition.

Despite the potential benefits of technology integration, several challenges remain, particularly in developing countries and rural educational settings. Issues such as limited infrastructure, inadequate access to digital resources, and insufficient teacher training hinder the effective implementation of technology in classrooms (Zhang, 2025; Taghizadeh & Hasani Yourdshahi, 2020). Teachers' confidence and competence in using technology have been identified as critical factors influencing successful integration. Studies indicate that teachers who possess higher levels of digital literacy are more likely to adopt innovative teaching practices and create engaging learning environments (Tabasi et al., 2024). Conversely, a lack of training and support often results in the underutilization or ineffective use of available technological tools.

While existing literature has extensively documented the challenges in English language learning and the benefits of technology integration, there is a growing need to examine these issues within specific educational contexts. In the Malaysian primary education system, variations in school location, access to resources, and teacher readiness create diverse learning environments that influence the effectiveness of instructional practices. Although prior studies have explored similar themes, many have treated challenges and technological solutions as separate constructs, with limited emphasis on their interaction within real classroom settings.

Therefore, this study addresses a critical gap by providing a comprehensive analysis of English learning challenges, the role of technology integration, and the identification of practical

instructional strategies within the Malaysian primary school context. By focusing on teachers' perspectives, this study offers context-specific insights that contribute to the development of more effective and sustainable approaches to English language teaching and learning.

Although numerous studies have examined challenges in English language learning and the integration of technology in ESL classrooms, there remains a lack of context-specific research focusing on Malaysian primary school settings, particularly from teachers' perspectives. Existing studies often address challenges and technological solutions in isolation, with limited emphasis on how these elements interact within real classroom environments. Furthermore, while emerging research highlights the potential of AI and digital tools in language education, there is insufficient empirical evidence on their relevance and applicability in resource-constrained contexts such as rural schools.

The present study seeks to address this gap by providing a comprehensive analysis of learning challenges, technology integration, and practical instructional strategies within the Malaysian primary education context. It aligns with past studies emphasizing the importance of integrating technology and student-centered pedagogies in ESL classrooms as well as the need for context-specific strategies that address both learner engagement and instructional effectiveness. The findings hope to further advocate the argument that effective English language teaching requires a balanced integration of pedagogy, technology, and learner needs within local educational contexts.

Conceptual Framework

Figure 1 illustrates the conceptual framework of this study, which encompasses three main components: independent variables (IV), dependent variable (DV), and moderating variables. The independent variables include the issues, barriers, and innovative solutions in English learning. The dependent variable is English learning achievement. The moderating variables include teacher gender, teaching experience, and school location, which may influence the impact of the independent variables on the outcome. A lack of motivation and traditional teaching methods can create a struggle to captivate students, while issues with grammar and vocabulary can impose significant challenges for them to grasp the complexities of English rules (Leona et al., 2021). These challenges create barriers that hinder English proficiency and participation.

To address these challenges, the framework brings together various learning theories, including the Constructivist Learning Theory, Self-Determination Theory, and Input Hypothesis. The Constructivist Learning Theory emphasizes the importance of actively constructing knowledge and encourages students to engage in hands-on learning experiences (Mishra, 2023). The Input Hypothesis highlights the significance of having clear and understandable input when learning a language. On the other hand, the Self-Determination Theory focuses on fostering a genuine internal motivation in learners (Alamer, 2022). These theories shape the teaching methods that can boost student engagement and highlight the importance of learning. Moreover, integrating technology is key to boosting English learning, with methods like blended learning, gamification, and AI-driven tools are capable of creating engaging and personalized learning experiences (Duisenova & Zhorabekova, 2023). These technological advancements facilitate the establishment of an engaging learning environment, hence breaking down traditional barriers that often come with learning English.

The main goal of addressing learning challenges, applying effective teaching strategies, and leveraging technology is to get students engaged while boosting their skills. By fostering motivation, enriching learning experiences, and providing interactive and relevant educational opportunities, students can improve their English proficiency and achieve better academic outcomes (Rose et al., 2020). This framework highlights a well-rounded approach, ensuring the incorporation of both teaching methods and technical tools to support effective English language learning.

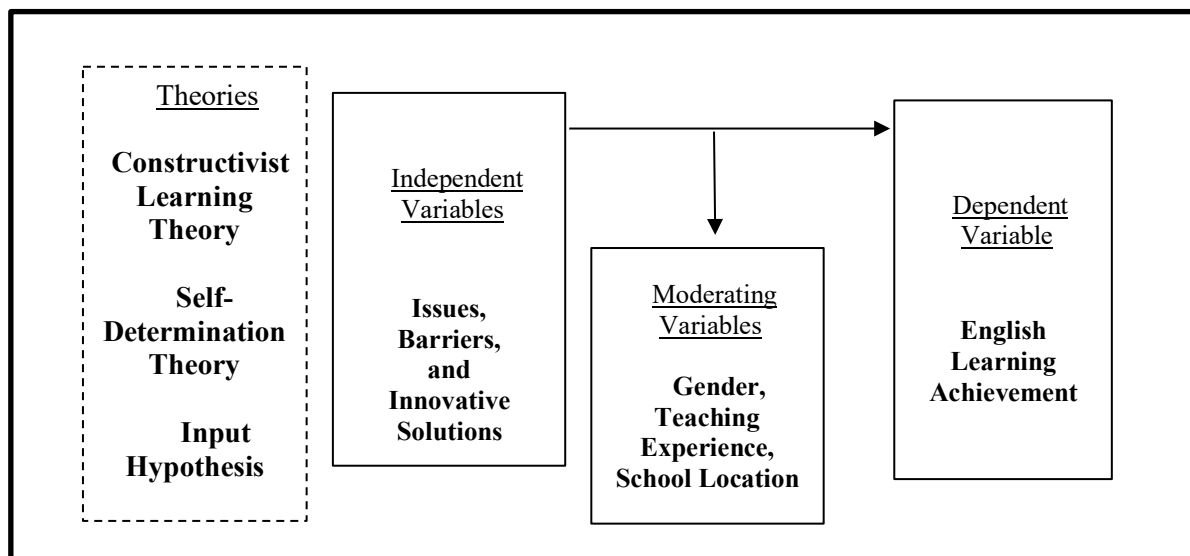


Figure 1. Effective English Learning

Methods

Research Design

This study employed a cross-sectional quantitative survey design to investigate the challenges in English language learning and the role of technology integration in primary education. Data were collected at a single point in time using a structured questionnaire administered to primary school English teachers. The design was selected to allow for the analysis of patterns, relationships, and trends in teachers' perceptions regarding students' learning challenges, engagement, and instructional practices. This approach is appropriate for examining the associations between variables and generating data-driven insights within a real-world educational context.

Participants and Population

The population of this study comprised 436 English optionist teachers in Kinta Utara based on the data provided by the Perak State Education Department (JPN). Krejcie and Morgan's (1970) sample size determination table suggests that the appropriate sample size for a population of $N = 440$ is approximately 205. To ensure robust data, a total of 252 responses were collected through cluster random sampling, which included teachers from both urban and rural schools. The selected teachers had (1) a minimum of three years of English language teaching experience and (2) access to or usage of technology in the classroom.

Instrument

A structured questionnaire was developed to gather information on teachers' perceptions, challenges, and needs related to technology integration in English language teaching. The instrument consisted of five sections: Demographic Information, Perceptions of Technology Use in English Learning, Challenges in Integrating Technology, Teachers' Needs for Technology Integration, and Suggestions for Improvement. A five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) was used to measure the responses. To ensure content validity, the questionnaire was reviewed by three subject-matter experts in Pedagogy, Teaching English as a Second Language (TESL), and ICT from the Faculty of Human Development, Sultan Idris Education University. Following expert validation, a pilot study was conducted with 30 primary English teachers outside the main sample group. The instrument demonstrated strong internal consistency with a Cronbach's alpha reliability coefficient of 0.85. To optimize participation, the questionnaires were distributed to schools in print and electronically via Google Forms. All respondents were allotted two weeks to complete the survey.

Data Analysis

The Statistical Package for the Social Sciences (SPSS) software was employed to analyze the data. Specifically, t-tests and ANOVA were used to examine the differences in challenges faced by students based on demographic factors such as gender, school location, and teacher experience, thus addressing Objective (a). Meanwhile, correlation analysis was administered to examine the relationship between technology integration and English learning achievement, thus addressing Objective (b).

Results

Table 1 below shows the working experience of the 252 primary school English teachers. The majority had over 10 years of teaching experience (63.5%), followed by those who had been teaching between 3 to 5 years (17.1%) and 6 to 10 years (11.9%). This indicates that the study mainly captured the views of seasoned educators, making the findings especially valuable for grasping the long-term challenges and opportunities in English language education.

Table 1. Working Experience

Working Experience	Frequency	Percentage
3–5 years	43	17.1
6–10 years	30	11.9
More than 10 years	160	63.5
Total	252	100.0

Table 2 illustrates the employment locations of the primary school English teachers. A nearly equal balance was evident between those stationed in rural (54.4%) and urban schools (45.6%). This mixture helps the study to gather insights from both rural and urban educators, paving the way for a holistic view of how technology is being integrated, the challenges faced by teachers,

and the level of student engagement in learning English.

Table 2. School Location

Location	Frequency	Percentage
Rural	137	54.4
Urban	115	45.6
Total	252	100.0

Table 3 demonstrates the teachers' attitudes toward using technology in English language teaching. It was measured using a 5-point Likert scale ranging from 1 "Strongly Disagree" to 5 "Strongly Agree". The findings show that teachers were generally confident in their ability to use technology ($M = 4.42$, $SD = 0.678$). They also strongly believed that technology helps improve students' English language skills ($M = 4.51$, $SD = 0.641$). However, many teachers admitted to struggling with limited access to technology ($M = 3.66$, $SD = 1.181$). This underscores a serious gap in technological resources across different schools.

Table 3. Teachers' Perceived attitude towards Technology Usage in Teaching English

Statements	Mean	Std. Deviation
Lack of access to technology	3.66	1.181
Confidence in using technology	4.42	0.678
Technology improves students' English language proficiency	4.51	0.641

Objective (b) was achieved by assessing the teachers' perceptions of how technology enhances student engagement in English learning. The results in Table 4 show that this item was rated very positively by both rural ($M = 4.64$) and urban teachers ($M = 4.67$). It reflects a strong belief that technology contributes positively toward student engagement regardless of the setting. The high mean values further reinforce the importance of integrating technology as a pedagogical tool in English language classrooms. However, the slight variation between both groups suggests that contextual factors, such as infrastructure or training, may influence the intensity or quality of technology usage.

Table 4. Descriptive Statistic

Enhance student engagement	School Location	N	Mean	Std. Deviation
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Rural	137	4.64	0.541
Urban	115	4.67	0.542

Objective (a) was addressed by conducting an independent samples t-test to explore whether school location (rural vs. urban) significantly influences the teachers' perceptions of how technology enhances student engagement. The results in Table 5 demonstrate no significant difference between rural ($M = 4.64$, $SD = 0.541$) and urban teachers ($M = 4.67$, $SD = 0.542$) ($t(250) = -0.505$, $p = 0.614$). Levene's test also confirmed the assumption of equal variances ($F = 0.364$, $p = 0.547$). Although the mean scores were slightly different, both groups rated technology's impact on student engagement as high, suggesting that teachers perceive technology as beneficial regardless of location. These findings imply that the perceived benefits of technology integration are consistent across school settings, though access and infrastructure may vary and warrant further exploration.

Table 5. T-test

Levene Test for Equality						
Enhance student engagement	F	Sig.	t	df	Significance One-Sided p	Two-Sided p
Equal variances assumed	0.364	0.547	-0.505	250	0.307	0.614

Furthermore, Pearson's correlation analysis was conducted to explore the link between teachers' confidence in using technology and their belief that technology boosts student engagement. The results in Table 6 reveal a moderate positive correlation ($r = 0.595$, $p < 0.001$), indicating that teachers who feel more confident in their technology skills are more likely to perceive it as a positive influence on student engagement. This highlights the importance of teacher training and digital literacy programs in building digital confidence among teachers and maximizing the effectiveness of technology in English classrooms through a wider adoption of technology-driven teaching methods. Although the difference was not statistically significant, the small effect size suggested a minimal practical difference between groups.

Table 6. Correlation

Variables	Confidence in Using Technology	
Enhance student engagement	Pearson's Correlation	0.595**
	Sig. (2-tailed)	<0.001

Discussion

The findings of this study highlight several persistent challenges in English language learning among primary school students, including limited exposure to the language, low motivation,

and difficulties in mastering grammar and vocabulary. This is consistent with previous studies, which emphasize that insufficient opportunities for meaningful language use hinder the development of communicative competence. From a constructivist perspective, the lack of interactive and student-centered learning environments limits students' ability to actively construct knowledge, thereby affecting their engagement and learning outcomes.

The study also found that teachers generally perceive technology as an effective tool for enhancing student engagement. It aligns with the principles of Self-Determination Theory, which suggest that engaging and interactive learning environments can foster intrinsic motivation among learners. However, disparities in technological access, particularly between rural and urban schools, indicate that the benefits of technology integration are not equally distributed. This finding supports existing literature, which highlights the digital divide as a significant barrier to effective technology implementation in education.

Furthermore, the positive correlation between teachers' technological confidence and their perception of student engagement suggests that teacher readiness plays a crucial role in the successful integration of digital tools. It reinforces the importance of continuous professional development and training to enhance teachers' digital competencies. However, while technology presents opportunities for improving English learning, it should not be viewed as a standalone solution. Instead, technology must be integrated with effective pedagogical practices to ensure meaningful learning experiences.

Overall, the findings of this study contribute to the growing body of literature on technology-enhanced language learning by providing context-specific insights into the Malaysian primary education setting. It underscores the need for a balanced approach that combines pedagogical innovation, technological support, and equitable access to resources in order to improve English language learning outcomes.

Implications and Proposed Innovative Strategies

Based on the findings of this study and supported by existing literature, several innovative instructional strategies are proposed to address the identified challenges in English language learning. One key approach involves the integration of AI-assisted learning tools, which can provide personalized learning experiences, immediate feedback, and adaptive learning pathways tailored to students' proficiency levels. Additionally, gamification strategies and interactive digital platforms can enhance student motivation and engagement, particularly among younger learners. However, it is important to note that these strategies are proposed as recommendations rather than empirical findings of the current study. Their implementation should be adapted to the specific context of schools, taking into account factors such as technological infrastructure, teacher readiness, and student needs. These approaches also align with contemporary pedagogical trends that emphasize student-centered learning and the effective use of educational technology.

Conclusion

This study examined the obstacles encountered by primary school pupils in acquiring English in non-native English-speaking contexts, highlighting factors such as restricted exposure, diminished motivation, challenges in grammar and vocabulary acquisition, and inadequate teaching methodologies. The findings indicate that technology significantly enhances student

engagement and learning results; nonetheless, numerous educators encounter obstacles to technology integration, especially in remote regions with little resource availability. Statistical investigations further validate that educators with greater confidence in utilizing technology often regard it as an efficacious instrument for enhancing student engagement and language acquisition. Disparities in school location and teacher experience levels influence access to and utilization of technology, hence exacerbating the difference in English language competency. These findings suggest that mitigating digital literacy disparities and ensuring equitable access to educational technology are crucial for enhancing primary students' English learning experiences. Additionally, student-centered approaches that integrate AI-driven solutions are necessary to tackle conventional difficulties in language acquisition, thus improving English learning results.

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