

Task-Based Language Teaching and Technology Integration in Vietnam: Trends and Frameworks

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Abstract

This study examines the integration of technology into Task-Based Language Teaching (TBLT) in Vietnam, focusing on current trends, classroom practices, and challenges in technology-enhanced English instruction. Using a convergent parallel mixed-methods approach, the research collected quantitative data from teacher surveys and qualitative insights from interviews with English teachers and academic managers across selected institutions. The study explores how digital tools support task-based learning, how teachers perceive the usefulness of technology, and which institutional factors influence its adoption.

Findings show that teachers frequently use interactive tools such as Kahoot, SMART Boards, and Padlet to increase student engagement and support formative assessment during task implementation. Despite these benefits, several challenges persist, including limited training opportunities, infrastructural constraints, and varying levels of digital literacy. The results also indicate that teachers' confidence in using technology, together with institutional support, strongly shapes their willingness to integrate digital tools into communicative tasks.

Based on these insights, the study proposes a Technology Adoption Framework consisting of four interconnected components: teacher professional development, accessibility of digital resources, learner engagement, and curriculum alignment. This framework offers a practical model for strengthening technology integration in TBLT-oriented classrooms and guiding institutions toward more effective digital pedagogy.

In summary, the study provides empirical evidence and a context-specific framework that supports the principles of TBLT and digital pedagogy. It highlights the critical role of institutional policy, targeted professional development, and continued capacity-building in advancing technology-supported communicative language learning in Vietnam.

Keywords: Task-Based Language Teaching, Technology Integration, English Instruction, Vietnam, Technology Adoption, Teacher Perceptions.

INTRODUCTION

Background of the Study

Education has undergone significant transformation with the advancement of technology, particularly in the field of language learning. One notable innovation is Task-Based Language Teaching (TBLT), which promotes real-world communication through meaningful tasks that require learners to use the target language purposefully (Sholeh et al., 2020). Contemporary TBLT emphasizes learner engagement, critical thinking, and skill development, supported by digital resources such as applications, online platforms, and interactive media (Ellis & Shintani, 2014; González-Lloret & Ortega, 2014).

In Vietnam, the integration of technology into education has been strongly encouraged through national reforms, including Education Law No. 43/2019/QH14 and Circular

No. 30/2023/TT-BGDĐT. These policies aim to enhance instructional effectiveness and promote learner autonomy through digital transformation. Despite these initiatives, teachers continue to face challenges such as insufficient training, limited access to technological resources, and large class sizes, which hinder effective implementation (Nguyen et al., 2021; Duong, 2019).

Moreover, Vietnam's decline in the 2020 EF English Proficiency Index underscores the urgent need to improve English language instruction through more innovative and effective teaching approaches (Saigoneer, 2020). Although technology-enhanced TBLT has shown strong potential to address these issues, gaps remain in the existing literature regarding the specific technologies used, the challenges teachers encounter, and the strategies they employ to ensure successful integration (Chong & Reinders, 2020;

González-Lloret, 2017).

Guided by these research gaps and informed by the researcher's professional experience as an English teacher and learner, this study investigates teachers' perspectives on integrating technology into TBL instruction. It seeks to identify key challenges and enabling factors and to develop a context-specific technology integration framework grounded in local practice. Focusing on Apollo English Vietnam, the study aims to contribute both theoretically and practically to the advancement of English language teaching in Vietnam and other comparable EFL contexts.

Statement of the Problem

This research explored how Task-Based Learning (TBL) integrated with technology was implemented in English language instruction at Apollo English Vietnam:

1. What is the extent of using technological tools in TBL in English language instruction?
2. What are the key aspects in which technological tools are used in Task-Based Learning (TBL) in English language instruction?
3. What challenges do the teachers encounter when using TBL with technology?
4. How does Task-Based Learning (TBL) with technology integration impact the effectiveness of English language instruction?
5. Based on the findings, what technology integration framework for Task-Based Learning (TBL) in English language instruction may be developed?

Assumptions

This study assumes that English language teacher participants provide honest and reflective responses during the semi-structured interviews and that their insights accurately represent their experiences with technology-integrated Task-Based Language Teaching (TBLT). It is also assumed that participants have adequate exposure to both technological tools and TBL strategies, allowing them to express informed perspectives. Furthermore, the study assumes that the qualitative data collected are sufficiently rich to generate valid themes through thematic analysis using Braun and Clarke's framework.

Theoretical Framework

To understand Task-Based Learning (TBL) in Vietnamese English language education, this study draws on Task-Based Language Teaching (TBLT) and the Technology Acceptance Model (TAM) as its main

theoretical foundations. TBLT emphasizes the use of authentic, real-world tasks to promote meaningful communication and language development (Willis, 1996; Willis & Willis, 2012). Grounding the study in TBLT allows for systematic examination of how teachers integrate technology into task-based instruction, identify recurring practices, and analyze challenges encountered during implementation. Core principles such as real-world communication (Ellis, 2003), task completion (Nunan, 2004), and communicative task design (Skehan, 1996) guide the analysis of how technological tools can enhance task-based language learning.

To complement this pedagogical perspective, the study employs the Technology Acceptance Model (TAM) to explain teachers' adoption and use of technology in TBL contexts. TAM identifies perceived usefulness and perceived ease of use as key factors influencing technology acceptance (Davis, 1989). Integrating TAM enables the study to examine teachers' attitudes, motivations, and decisions regarding digital tools and how these perceptions shape classroom practice. The combined use of TBLT and TAM provides a comprehensive framework for understanding both instructional practices and technology adoption processes. This integrated perspective supports the development of a context-specific technology adoption framework for English teachers in Vietnam, particularly within Apollo English, and offers insights into improving task-based instruction through effective and sustainable technology integration.

Conceptual Framework

This study adopts a mixed-methods conceptual framework that highlights the relationship between Task-Based Language Teaching (TBLT) and the Technology Acceptance Model (TAM) in examining technology integration in English language instruction. TBLT serves as the independent variable, providing the pedagogical foundation for analyzing task-based practices, while perceived usefulness and perceived ease of use from TAM function as mediating factors influencing teachers' technology adoption. For the qualitative component, moderating factors include teachers' professional characteristics, experience with technology integration, instructional use of technological tools, challenges encountered, and the perceived impact of technology-enhanced TBL on teaching effectiveness. For the quantitative component, the moderating factor focuses

on how teachers utilize technological resources when implementing TBL.

The qualitative phase explores teachers' experiences and perceptions of integrating technology into TBL through interviews, allowing for in-depth understanding of instructional practices, challenges, and classroom impact. The quantitative phase examines patterns of technology use and acceptance through a survey administered to Apollo English teachers in southern Vietnam, using TAM constructs to assess how technology supports teaching

effectiveness and student learning outcomes. By integrating findings from both approaches, the study examines the relationship between teachers' perceptions and their actual use of technology in TBL. Ultimately, this conceptual framework informs the development of a Technology Adoption Framework tailored to the Vietnamese context, offering practical guidance for improving English language teaching through effective and sustainable technology integration.

Figure 1. The Variables in the Study

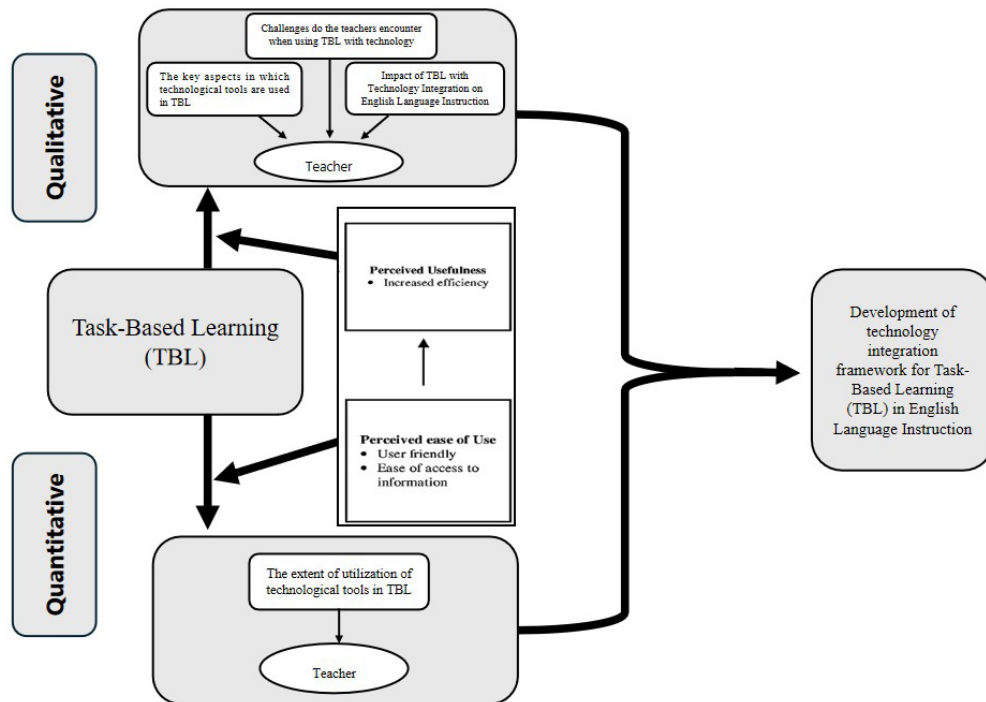


Figure 1. Conceptual Framework of the Study

Scope and Limitations of the Study

This study examined the perspectives of academic management and English language teachers at Apollo English in southern Vietnam on the integration of technology into Task-Based Language Teaching (TBL). The qualitative phase involved 13 purposively selected teachers with at least one year of experience implementing technology-enhanced TBL. The quantitative phase invited all Apollo English teachers across southern Vietnam to participate. Data were drawn exclusively from Apollo English teachers in southern Vietnam, which may limit the generalizability of the findings.

The significance of the Study

This study explains the integration of technology and task-based learning in English language training. By

examining teachers' perspectives and experiences about the use of technology in task-based learning, as well as their problems and coping strategies, this study seeks to further the field of English language instruction.

Contribution to the Body of Knowledge in the Field of Education.

This study will illustrate how teachers' perspectives and experiences are altered when technology is included in task-based learning strategies; it will add to the corpus of knowledge in education. It will also contribute to research on the effectiveness of language learning with technological support. The results may enhance our comprehension of ideas, guide future investigations, and provide empirically supported methods in language teaching and educational technology, contributing to nation-building.

Continuous Improvement of the Teaching-Learning Process. This research investigates the benefits and drawbacks of integrating technology into task-based learning activities to maintain or improve the teaching-learning process. Understanding the issues that English teachers encounter and developing solutions for them is the most excellent approach to enhancing teaching strategies. It will assist educators in refining their methods, strengthening the teaching and learning process, and encouraging students to become more engaged, motivated, and academically successful.

Contribution to Nation Building. This study contributes to the nation's development by improving the quality and innovation of English language instruction, which is a valuable skill in the global economy. It equips teachers and students with the tools they need to become more skilled, adaptable, and competitive on a global scale by integrating teaching with digital transformation. The study also promotes effective and inclusive education, which is critical to the country's growth.

Promotion of Value and Social Relevance. This research investigates the effects of integrating technological tools into task-based learning. It will inform us how well technology works for language acquisition, which could enhance and add value to Vietnamese English language training. Furthermore, this study will show how technology tools can be used to meet the requirements and desires of students in the digital age. This will make learning a language more applicable to daily life.

Definition of Terms

Effective communication and understanding of research results depend on the precise definitions of essential terms and ideas. These definitions facilitate the development of a common understanding between researchers and readers.

English Language Instruction. It refers to the structured process of teaching English to learners, particularly as a second or foreign language, using various pedagogical strategies. In this study, it refers to how English is taught at Apollo English Vietnam within a TBL framework supported by technology.

Perceived Ease of Use. The extent to which a teacher believes that using a specific technological tool is free of

effort or complexity. In this study, it refers to teachers' comfort and confidence in using tech tools during TBL instruction.

Perceived Usefulness. This is the extent which a teacher believes that using a specific technological tool will enhance their teaching effectiveness. In this study, it reflects teachers' evaluations of tool impact on TBL outcomes.

Task-Based Learning (TBL). It is a language teaching approach that uses real-world tasks as the central unit of instruction, encouraging meaningful communication and learner engagement. In this study, it pertains to how teachers implement TBL in English instruction using technology.

Teachers' Perspectives and Experiences. These refer to the insights, attitudes, and firsthand accounts of English teachers regarding their use and integration of technology in TBL environments. In this study, it includes their views, challenges, and coping strategies.

Technological Tools. These refer to the devices, applications, or digital platforms (e.g., computers, smartphones, interactive whiteboards) to enhance task design, learning engagement, and instructional delivery in English language classrooms used by teachers. In this study, it refers to tools used by teachers to support TBL activities.

Technology Integration Framework. A proposed model was developed in this study to guide the structured adoption and use of technology in TBL-based English instruction. In this study, it serves as a proposed guide for instructional implementation.

Technology Integration. It refers to embedding technological tools into teaching and learning practices, particularly within task-based instructional activities. In this study, it pertains to how these tools are embedded into TBL tasks in English teaching.

Vietnamese Context. This refers to the educational setting, teaching practices, and sociocultural conditions specific to Vietnam, particularly within private institutions like Apollo English. The study's findings and implications are situated within the specific educational and cultural setting of Vietnam.

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents a critical review of literature on integrating technology into Task-Based Language Teaching (TBL) in English language instruction. It discusses key theories and empirical findings on TBL, highlights commonly used technological tools in language classrooms, and examines challenges in technology-enhanced TBL implementation.

Task-Based Learning in English Language Instruction

Task-Based Learning (TBL) is a communicative approach that develops learners' language proficiency through meaningful, goal-oriented tasks that reflect real-world language use (Prabhu, 1987; Nunan, 2004; Skehan, 1996; Willis & Willis, 2007). Unlike grammar-centered teaching, TBL prioritizes purposeful communication and active learner participation. Nunan (2004) notes that TBL increases motivation and improves retention because learners use language in realistic situations. Willis and Willis (2007) emphasize "learning by doing" through role plays, simulations, and problem-solving tasks, while Skehan (1996) highlights the need to balance fluency, accuracy, and complexity in task design.

Empirical studies support the effectiveness of TBL. Mirhassani and Borjian (2020) highlight that TBL strengthens learner autonomy by encouraging decision-making, interaction, and responsibility for learning. Kádár and Ahmed (2019) and Brunton (2019) report improvements in pragmatic competence and communicative performance through tasks that mirror everyday language demands. Kim and Elder's (2019) meta-analysis also confirms that TBL positively influences learner motivation and language outcomes. Furthermore, Gonçalves and Oliveira (2020) found that allowing learners to choose tasks aligned with their interests supports self-directed learning and metacognitive growth. Overall, the literature shows that TBL promotes meaningful language use, stronger engagement, and improved communicative competence.

Technological Tools for TBL in English Language Instruction

Technology has expanded how teachers design, deliver, and monitor task-based instruction. Technology-mediated TBL uses interactive and multimodal tools that increase participation and collaboration (González-Lloret & Ortega, 2014; Ziegler, 2016). Platforms such as Moodle, Blackboard, Google Classroom, and Canva support task

delivery, group collaboration, and learner reflection, while also giving teachers tools for monitoring progress (Lee, 2016). These tools align with learner-centered TBL because they allow students to plan, perform, and review tasks with greater autonomy.

Research shows that technology can strengthen TBL outcomes. Project-based and collaborative tasks become more feasible through digital tools that support real-time sharing, communication, and production (Stoller, 2006; Reinders & Wattana, 2014). Virtual reality and augmented reality provide immersive contexts that enhance motivation and contextual learning (Liu & Wang, 2020; Li et al., 2019; Reinhardt, 2019). Video-based tasks also support speaking development and pragmatic competence when tasks are clear and well scaffolded (González-Lloret et al., 2020). In addition, AI tools, automated writing evaluation systems, and chatbots provide immediate feedback and structured practice that can support task completion (Golonka et al., 2014; Bibauw et al., 2019; Guo & Yang, 2021). However, the effectiveness of these tools depends on intentional task design and strong teacher capacity.

In Vietnam, technology integration is increasing, but implementation remains uneven. Studies note challenges such as limited infrastructure, unequal access, and differences in teacher readiness, along with the continued influence of teacher-centered instructional traditions (Pham, 2011; Truong & Tran, 2014; Nguyen et al., 2017). Researchers emphasize that successful integration requires professional development, institutional support, and alignment with curriculum goals and assessment systems (Nguyen & Duong, 2020; Hoang, 2018). Thus, technology strengthens TBL when schools support teachers and ensure that digital tools serve clear pedagogical purposes.

Challenges in Using Technology for TBL

Despite its benefits, technology integration in TBL often faces persistent challenges. One major issue is the digital divide, as access to devices and stable internet varies across learners, particularly in rural or low-income contexts (Chen et al., 2019; Kaya & Bektas, 2019). Limited access reduces opportunities for collaboration and may exclude students from technology-mediated tasks. Technical issues such as software glitches, weak connectivity, and device incompatibility also disrupt lessons and reduce teachers' willingness to rely on digital tools (Kessler & Bikowski, 2020).

Another challenge is student distraction, especially when digital rules and task expectations are unclear. Arif and

Widodo (2020) emphasize that teachers must set clear guidelines and design focused tasks to keep learners engaged. Misalignment between technology use and TBL principles can also weaken learning outcomes, especially when technology is used as an add-on rather than a tool for authentic communication and problem-solving. Finally, gaps in digital competence affect both teachers and learners. Teachers may lack training to manage digital tasks effectively, while students unfamiliar with platforms may experience anxiety and participate less (Meireles & Gomes, 2019; Ellis, 2019). These challenges show that effective implementation requires access, reliability, purposeful pedagogy, and continuous training.

Development of a Technology Integration Framework

To support effective integration, this study draws on four key models that explain technology adoption and instructional alignment. TAM explains teachers' adoption through perceived usefulness and perceived ease of use (Davis, 1989; Teo, 2009). UTAUT extends this by emphasizing social influence, facilitating conditions, and effort expectancy, highlighting the role of institutional support and professional culture (Venkatesh et al., 2003). TPACK stresses that effective integration depends on the alignment of content, pedagogy, and technology, which guides teachers in selecting tools that support task goals (Mishra & Koehler, 2006). Diffusion of Innovations explains how new practices spread within institutions and why adoption differs across individuals and contexts (Rogers, 2003).

Empirical studies support these frameworks in technology-mediated TBL contexts. Digital platforms such as Moodle and Canva enhance collaboration, monitoring, and feedback (Hampel, 2006; Stoller, 2006). Adaptive platforms support learner autonomy through personalized pacing and practice (Deng et al., 2020). Immersive tools such as VR and AR strengthen contextual learning and motivation (Li et al., 2019; Reinhardt, 2019). AI-supported tools also provide immediate, individualized feedback that supports task completion (Golonka et al., 2014; Bibauw et al., 2019). Overall, these models provide a strong foundation for understanding why teachers adopt technology and how digital tools can be aligned with TBL goals. This theoretical grounding supports the development of a contextualized framework for sustainable technology integration in TBL-based English instruction.

Synthesis

Task-Based Language Teaching (TBLT) is a learner-centered approach that effectively enhances motivation, communicative competence, and language proficiency through meaningful, authentic tasks. Research consistently shows that technology can further strengthen TBLT by supporting collaboration, personalization, feedback, and immersive learning through tools such as virtual reality, adaptive systems, and multimodal activities. However, successful implementation requires careful attention to task design, learner needs, assessment, and pedagogical alignment. Despite its benefits, technology integration presents challenges, including the digital divide, technical issues, and insufficient teacher training, which may limit equitable access and effectiveness. The literature highlights the need for sustained institutional support and further research on long-term impacts and best practices to ensure that technology-enhanced TBLT can create engaging, inclusive, and effective language learning environments.

METHODOLOGY

Research Design

This study employed a convergent parallel design, a mixed-methods approach in which quantitative and qualitative data are collected simultaneously and analyzed separately before being integrated (Creswell & Plano Clark, 2011). This design is appropriate when a research problem requires both measurable outcomes and in-depth contextual understanding. Equal priority is given to both data types, allowing for a more comprehensive and robust interpretation of findings (Morse, 1991). In this study, surveys were administered to English language teachers and academic managers as the quantitative component, while interviews and open-ended responses formed the qualitative component. Both data strands were collected during the same period. Survey data were analyzed using descriptive and inferential statistics, while qualitative data were examined through thematic analysis. The results from both approaches were then compared and integrated to identify convergences, differences, and complementary insights, thereby strengthening the depth and credibility of the findings on technology integration in task-based language instruction.

Sample and Sampling Design

For the quantitative phase, stratified sampling was used to ensure representation of Apollo English teachers

across 21 centers in Ho Chi Minh City, organized into four zones: Red, Blue, Pink, and Yellow. All teachers were invited to participate, resulting in responses from 128 of 154 teachers and all 15 academic managers, providing a large and diverse sample that strengthened the generalizability of the findings on technology-integrated Task-Based Learning (TBL). For the qualitative phase, purposive sampling selected 13 participants—7 teachers and 6 academic managers—who had at least one year of experience at Apollo English and had implemented TBL using technological tools. Selection was guided by data saturation to capture varied perspectives across roles and experience levels. Interviews were conducted online or face to face based on participant preference, and confidentiality was ensured by assigning codes P1–P13.

Context and Participants

This study was conducted at Apollo English, a private English language institution in southern Vietnam that implements Task-Based Learning (TBL) as its primary instructional approach. Participants included academic managers and English language teachers with experience integrating technology into TBL, selected to represent diverse roles, experience levels, and familiarity with digital tools, with sample size guided by data saturation (Creswell & Creswell, 2018). Using a mixed-methods design, data were collected through surveys and interviews to examine perspectives on technology-enhanced TBL and inform improved instructional practices. The research covered four Apollo English zones across 21 centers located in various cities and provinces in southern Vietnam.

Research Instrument

This study used two research instruments: a researcher-made questionnaire and a semi-structured interview. These tools were designed to collect both quantitative and qualitative data in alignment with the mixed-methods design.

Researcher-Made Questionnaire. The questionnaire was developed to measure the extent of technology use in Task-Based Language Teaching (TBL) in English language instruction. Based on relevant literature and the study objectives, it consisted of 28 items covering commonly used digital platforms, tools, and applications for planning, delivering, and managing TBL-oriented lessons. Content validity was established through evaluation by three experts from the National University of Laguna, who

reviewed the items for clarity and alignment with the research objectives. After revisions, the instrument was approved for pilot testing and administered to English language teachers in either online or printed format, depending on accessibility. Responses were rated using a four-point Likert scale (Least Extent to Very Great Extent), and mean scores were computed to determine overall levels of technology integration in TBL practices.

Semi-Structured Interview. A semi-structured interview guide was developed to explore teachers' and academic managers' experiences, challenges, and perceptions of technology integration in TBL. The guide contained eleven core questions derived from the literature review and research questions, covering instructional practices, implementation challenges, institutional support, and training. Four PhD-qualified experts in language education reviewed the interview guide and recommended refinements, resulting in a more focused final version. Participants were selected through purposive sampling and interviewed either face to face or online, based on availability. All interviews were audio-recorded with permission, and ethical standards such as informed consent and confidentiality were strictly observed.

Overall, the systematic development, validation, and administration of both instruments ensured the collection of reliable and relevant data. The combination of survey results and in-depth interview insights enabled a comprehensive examination of technology integration in Task-Based Language Teaching within English language instruction.

Data Gathering Procedure

This study utilized two research instruments: a researcher-made survey questionnaire and a semi-structured interview protocol. Prior to data collection, ethical approval was obtained from the Dean of the Graduate School at National University–Laguna Campus, followed by institutional permission from the Academic Department of Apollo English. The researcher then coordinated with the institution to identify eligible participants—English teachers and academic managers who had at least one year of full-time experience and were engaged in technology-supported Task-Based Language Teaching (TBL).

The interview protocol was developed and refined under the guidance of the researcher's mentor and panel, then validated by experts. After validation, informed consent procedures were implemented, ensuring voluntary

participation, confidentiality, and transparency regarding data use. Ethical safeguards, including anonymity and compliance with institutional review board guidelines, were strictly observed.

For the qualitative phase, selected participants were invited and briefed on the study's purpose. Interviews were scheduled based on participant availability and conducted either face to face or online. With permission, interviews were audio-recorded, transcribed promptly, and returned to participants for verification. Follow-up interviews were conducted when clarification was needed, and the verified transcripts were later analyzed thematically.

The quantitative phase involved developing and expert-validating the survey questionnaire. Following validation, the questionnaire was administered online and in person, depending on participant accessibility. Completed responses were collected, organized, and analyzed using descriptive statistics, particularly mean computation, to identify trends in technology use within TBL instruction. Finally, triangulation was applied by integrating findings from both qualitative interviews and quantitative surveys. Comparing results across data sources strengthened the credibility of the findings and provided a comprehensive understanding of technology integration in task-based language instruction.

Data Analysis

Consistent with the mixed-methods design, this study employed both quantitative and qualitative data analysis techniques. Quantitative data were analyzed using descriptive statistics, while qualitative data were examined through Braun and Clarke's (2006) thematic analysis framework.

For the quantitative phase, responses from the researcher-made questionnaire were organized and analyzed using descriptive statistics, with the mean used as the primary measure of central tendency. This approach enabled the identification of overall patterns in teachers' use of technological tools in Task-Based Language Teaching (TBL) and facilitated comparisons across participant groups, including teachers and academic managers.

For the qualitative phase, data from the semi-structured interviews were analyzed following Braun and Clarke's (2006) six-step thematic analysis process. The analysis began with data familiarization through repeated reading of interview transcripts and field notes. All interviews were transcribed verbatim, and participants were given the opportunity to verify the accuracy of their transcripts.

Initial codes were generated from significant statements, and related codes were grouped to form preliminary themes. These themes were reviewed, refined, and clearly defined to reflect participants' experiences and perceptions of technology integration in TBL. Integrating thematic findings with quantitative results enhanced the study's validity and provided a comprehensive understanding of how technology supports task-based instruction across instructional contexts.

Ethical Considerations

This study followed established ethical guidelines to ensure transparency and participant protection. Approval was obtained from the Dean of the Graduate School at National University Laguna and the Academic Department of Apollo English, and all participants provided informed consent. Confidentiality and anonymity were maintained through coded identifiers and secure data storage, with participants allowed to review their transcripts. Ethical standards were upheld throughout data collection, analysis, and reporting.

RESULTS AND DISCUSSIONS

This presents the data gathered in both table and narrative form.

Extent of Using Technological Tools in TBL in English Language Instruction

Table 1 presents descriptive statistics on the frequency of technological tool use in supporting Task-Based Learning (TBL) in English language instruction. It summarizes respondents' use of various digital tools and reports the corresponding mean scores and standard deviations to indicate usage levels.

SMART Boards were used to a high extent, particularly for collaborative activities ($\bar{x} = 2.98$, $SD = 0.899$) and for explaining complex concepts ($\bar{x} = 2.93$, $SD = 0.926$). These findings indicate that teachers strongly prefer visual and interactive technologies to simplify abstract content and promote hands-on learning. This supports González-Lloret and Ortega (2014), Li et al. (2019), and Reinhardt (2019), who emphasize that interactive visual tools enhance comprehension, engagement, and real-world task completion in TBL environments. Collectively, these findings reinforce the role of SMART Boards as an effective tool for fostering active participation and meaningful task-based learning.

Table 1. Extent of Using Technological Tools in TBL in English Language Instruction

Indicators		Weighted Mean (\bar{x})	Standard Deviation (SD)	Verbal Interpretation
1.	The use of LMS to organize and deliver content.	2.70	.871	high extent
2.	Applying LMS to foster connections between students, teachers, and parents.	2.35	.933	moderate extent
3.	The adoption of interactive multimedia tools like simulations for real-life scenarios.	2.32	.919	moderate extent
4.	Integrating SMART Boards for explaining complex concepts.	2.93	.926	high extent
5.	Using SMART Boards for collaborative activities.	2.98	.899	high extent
6.	Tools like Kahoot! Quizlet, and Socrative for assessments.	2.91	.878	high extent
7.	Incorporating e-books for easy access to updated materials.	2.79	.981	high extent
8.	Using e-books with features like annotations and multimedia.	2.78	1.043	high extent
9.	Employing VR and AR tools to teach cultural contexts and real-world scenarios.	2.14	1.035	moderate extent
10.	Tools like Google Docs and Padlet effectively enhance collaboration and group work through real-time updates.	1.78	.919	moderate extent
11.	Blogging platforms for reflective essays and journals.	1.86	1.012	moderate extent
12.	Grammarly for improving writing	1.77	.978	moderate extent
13.	Game-based platforms.	2.42	1.057	moderate extent
14.	Flipgrid and Google Classroom for videos and projects.	2.22	1.079	moderate extent
15.	Survey tools like Mentimeter and Google Forms.	1.68	.902	low extent
16.	Canva and Prezi for creating presentations.	1.71	.904	low extent
17.	Quizlet and Blooket.	2.27	1.062	moderate extent
18.	Video conferencing platforms like Zoom and Google Meet.	2.31	1.049	moderate extent
19.	Collaborative tools like Jamboard.	1.76	1.020	moderate extent
20.	Quizlet and Memrise for vocabulary activities.	1.81	.966	moderate extent
21.	Liveworksheets and Coggle.	1.80	.945	moderate extent
22.	Video editing software like Filmora and iMovie.	1.72	.952	low extent
23.	Language tools like Google Translate and ChatGPT.	1.87	1.059	moderate extent
24.	Platforms like Seesaw and PowerPoint.	2.29	1.060	moderate extent
25.	Tablets for real-world tasks.	2.28	.999	moderate extent
26.	Laptops for research and presentations.	2.35	1.112	moderate extent
27.	Smart TVs for interactive content and group activities.	2.86	1.039	high extent
28.	Smartphones for research and collaboration.	2.87	1.051	high extent
	Composite Mean	2.2695	.56136	moderate extent

Legend: low extent (1.00-1.75), moderate extent (1.76-2.50), high extent (2.51-3.25), very high extent (3.26-4.00)/ n=132

Gamified assessment tools such as Kahoot!, Quizlet, and Socrative were also used to a high extent (\bar{x} = 2.91, SD = 0.878). Their popularity reflects the motivating and interactive nature of game-based assessments, aligning with findings by Hitosugi et al. (2014) and Reinders and

Wattana (2015), who report that gamification increases learner engagement and supports effective evaluation in TBL.

Smartphones were highly used for research and collaboration (\bar{x} = 2.87, SD = 1.051), demonstrating

their practicality for real-time information access and peer interaction. This aligns with Reinders and Wattana (2014), González-Lloret and Ortega (2014), who highlight how mobile technologies facilitate on-the-spot research, collaboration, and communication in TBL settings.

Smart TVs received a high rating ($\bar{x} = 2.86$, $SD = 1.039$), indicating their usefulness in presenting multimedia content and supporting group tasks. These findings correspond with Li et al. (2019) and González-Lloret & Ortega (2014), who emphasize the value of large-screen displays for enhancing interaction and real-world simulations.

Survey tools such as Mentimeter and Google Forms were used to a low extent ($\bar{x} = 1.68$, $SD = 0.902$), which may reflect limited training or unfamiliarity. This finding aligns with Nguyen and Duong (2020) and Meireles and Gomes (2019), who note that insufficient digital competence impedes teachers' integration of such tools.

Similarly, presentation platforms like Canva and Prezi ($\bar{x} = 1.71$, $SD = 0.904$) and video editing tools such as Filmora and iMovie ($\bar{x} = 1.72$, $SD = 0.952$) were also used to a low extent. The complexity and time required to use these tools may contribute to their limited adoption, consistent with Dang and Webb (2014), Ellis (2019), and Meireles and Gomes (2019).

Collaborative tools like Jamboard showed moderate but lower-end usage ($\bar{x} = 1.76$, $SD = 1.020$), likely due to redundancy with more familiar apps. Grammarly also showed moderate but lower-end usage ($\bar{x} = 1.77$, $SD = 0.978$), possibly because it is more learner-driven than teacher-directed. These findings align with those of Guo and Yang (2021) and Nguyen and Duong (2020), who highlight the importance of guided integration for the successful use of digital tools.

Digital reading tools received high ratings, including e-books for updated content ($\bar{x} = 2.79$, $SD = 0.981$) and multimedia/annotation e-books ($\bar{x} = 2.78$, $SD = 1.043$). These tools support interactive reading and updated content delivery, consistent with Godwin-Jones (2017) and Winke and Gass (2019).

Learning Management Systems (LMS) for content delivery were widely used ($\bar{x} = 2.70$, $SD = 0.871$), underscoring their importance in organizing materials and managing tasks. Game-based learning platforms showed moderate usage ($\bar{x} = 2.42$, $SD = 1.057$), supporting Reinders and Wattana's (2015) findings that gamification increases motivation.

Tools such as laptops ($\bar{x} = 2.35$, $SD = 1.112$), LMS communication features ($\bar{x} = 2.35$, $SD = 0.933$), interactive simulations ($\bar{x} = 2.32$, $SD = 0.919$), videoconferencing

platforms ($\bar{x} = 2.31$, $SD = 1.049$), Seesaw and PowerPoint ($\bar{x} = 2.29$, $SD = 1.060$), tablets and vocabulary apps like Quizlet and Blooket ($\bar{x} = 2.27$, $SD = 1.062$), and language tools like Google Translate and ChatGPT ($\bar{x} = 1.87$, $SD = 1.059$) all showed moderate usage. These tools support various aspects of TBL, including communication, collaboration, research, and vocabulary building, as supported by Truong and Tran (2014), Li et al. (2019), and Golonka et al. (2014).

The overall composite mean of 2.27 ($SD = 0.56136$) indicates a moderate extent of technology integration in TBL-oriented English instruction. This suggests that while several high-utility tools (e.g., SMART Boards, smartphones, gamified platforms) are well integrated, more complex tools requiring advanced digital skills remain underutilized. Consistent with Nguyen and Duong (2020) and Meireles and Gomes (2019), these results highlight the need for targeted teacher training, institutional support, and alignment between digital tools and pedagogical goals to strengthen the integration of technology in TBL.

The key aspects in which technological tools are used in Task-Based Learning (TBL) in English language Instruction

Theme 1: Collaborative and Interactive Tools.

The first theme identified in the qualitative analysis was the strategic use of collaborative and interactive tools to enhance peer engagement and task-based participation. Participant 1 shared, "Google Slides is used for collaborative tasks where students can tag each other and send notes." Other teachers highlighted using Jamboard for online collaboration and ChatGPT for differentiating tasks and generating worksheets. Participant 8 noted, "The IWB is used with resources like Bamboozle or Kahoot." At the same time, Participant 13 explained that "online games are integrated where standing up and interacting with the interactive board or the online games can occur." These accounts show that teachers intentionally select digital tools to promote engagement, physical movement, communication, and teamwork.

The findings indicate that technology supports dynamic, student-centered learning in TBL environments. Interactive platforms help facilitate communication and social interaction, consistent with Reinders and Wattana (2015) and Hitosugi et al. (2014), who highlight the role of digital games in meaningful language use. This aligns with TBL's "learning by doing" principle (Willis & Willis, 2020) and reflects the authentic interaction emphasized

by González-Lloret and Ortega (2014). The teachers' statements show clear awareness of how digital tools enhance student engagement, peer interaction, and deeper learning. Technology is used not only for content delivery but also to support interactive and communicative task-based learning.

Theme 2: Technological Integration in Instruction. The second theme, Technological Integration in Instruction, highlights the purposeful and seamless use of digital tools across different stages of teaching and learning. Participant 6 described general integration by stating, "I use PowerPoint, Bamboozle, Kahoot, Wordwall, or even YouTube." Participant 2 emphasized routine application, noting, "I use the interactive whiteboard as an integrated part of the classroom." Participant 9 added a more comprehensive approach: "I use Canva and Vocaroo for student outputs and feedback." These responses were initially coded as "instructional platforms," "multimedia integration," and "student outputs," and were later grouped under the broader theme of Classroom Technology. Collectively, the statements show that teachers view technology not as a supplement, but as a central component of instruction, used to enhance lessons, support motivation, and tailor tasks to students' needs.

This theme aligns with Ziegler (2016) and González-Lloret and Ortega (2014), who emphasize that well-integrated technology enables teachers to design meaningful, authentic tasks and scaffold student learning. Tools such as Canva and Vocaroo allow students to create multimodal outputs, encouraging creativity and deeper expression—key features of technology-enhanced TBL. The daily use of interactive whiteboards and multimedia tools also illustrates the practical application of the TPACK framework, which stresses the alignment of technological, pedagogical, and content knowledge (Mishra & Koehler, 2006). Such integration supports personalized learning by allowing tasks to be adapted to individual strengths and needs. As noted by Deng et al. (2020), digital technologies enable learners to engage with language in ways that match their learning preferences. Overall, this approach reinforces student-centered, task-based learning and aligns closely with the core principles of TBL.

Theme 3: Assessment and Feedback Mechanisms. The third theme, Assessment and Feedback Mechanisms, focuses on how teachers use digital tools to monitor student progress and facilitate both peer and instructor feedback.

Participant 3 shared, "I use that system to determine what students have been struggling with and give proper error correction," referring to a feedback platform paired with tools such as Kahoot and Blooket. Participant 9 explained, "I use Kahoot and Blooket for pre-tasks to introduce lessons," while Participant 11 described using Padlet, stating, "students can write their paragraphs, and they can give each other ratings or correct each other's mistakes." These responses were coded as "formative feedback," "peer review," and "assessment platforms," which were then categorized under the broader theme of Digital Assessment Tools. Collectively, they demonstrate how teachers use technology to support reflective learning, track development, and create a feedback-rich environment. These practices illustrate how digital tools support continuous assessment, a core feature of effective task-based learning. Platforms such as Padlet enable self- and peer feedback, fostering learner responsibility and self-regulation. This aligns with Guo and Yang (2021), who note that automated feedback supports ongoing improvement, and with Godwin-Jones (2017), who emphasizes the role of analytics in informing instruction and monitoring progress.

Theme 4: Engaging Multimedia Resources. The fourth theme, Engaging Multimedia Resources, emerged from participants' references to videos, songs, smart TVs, and interactive slideshows. Teacher 4 shared, "I normally use a lot of slides and presentations," while Participant 10 noted, "I also incorporate videos and songs into my lessons." Teacher 5 added, "The smart TVs are fantastic... they have vocabulary, videos, and interactive games." These responses were coded as "multimedia integration," "audio-visual tools," and "student engagement," later forming the broader category Multisensory Teaching Resources. This theme illustrates how multimedia supports comprehension, maintains student attention, and creates a varied learning environment that caters to different learning preferences. The testimonies indicate that multimedia resources support diverse learners and strengthen TBL by providing rich, interactive input. Video-based and visual tools enhance real-world language use, deepen comprehension, and increase engagement when tasks are properly scaffolded (González-Lloret et al., 2020; Li et al., 2019). In TBL contexts, multimedia makes tasks more relevant and motivating, reinforcing the learner-centered nature of the approach. These findings align with Kim and Elder (2019), who note that varied input increases motivation

and enhances task-based learning outcomes.

Theme 5: Digital Learning and Interactive Engagement.

The fifth theme, Digital Learning and Interactive Engagement, emerged from participants' descriptions of tools that promote hands-on, student-centered learning. Participant 12 highlighted the tactile nature of some activities, stating, "There are times when students will touch the screen to identify words or arrange letters." Participant 7 described using apps for STEAM-related tasks, explaining, "We used a decibel-measuring app to test soundproofed boxes." These responses were coded as "touchscreen interaction," "gamification," and "STEAM integration," and later grouped under the category Interactive Learning Tools. This theme illustrates how technology is used not only to present information but also to encourage experimentation, exploration, and active participation.

These examples show that digital tools extend beyond information delivery by allowing learners to manipulate, test, and experience concepts in meaningful ways. This aligns with Reinders and Wattana (2015) and Hitosugi et al. (2014), who note that game-like digital activities can enhance motivation and engagement in TBL settings. Similarly, Deng et al. (2020) emphasize that flexible and exploratory tools support learner autonomy and help students engage with tasks in ways that suit their individual learning styles. Such practices reflect core principles of TBL, which center on learning by doing and empowering students to take an active role in their own learning.

Theme 6: STEAM Tools and Engineering Integration.

The last theme, STEAM Tools and Engineering Integration, highlights how teachers incorporate technology to support both language learning and critical thinking through interdisciplinary tasks. Participant 7 explained, "I used to use Scratch and Python," and described a project where "students designed dream houses and presented them using PowerPoint as if they were architects." Participant 5 added, "We use vocabulary games from websites like Wordwall and Bamboozle." These responses were initially coded as "coding tools," "STEAM projects," and "design integration," and were later consolidated under the broader category STEAM-Enhanced Language Tasks. These examples show that some teachers go beyond traditional language lessons by embedding design, coding, and problem-solving activities, thereby strengthening students'

technical and communication skills.

The testimonies demonstrate how integrating language tasks with coding and design activities can enhance learning across subject areas. Such activities require students to communicate, collaborate, and solve problems effectively. This aligns with Stoller (2006) and Reinders and Wattana (2014), who emphasize that project-based, technology-supported tasks place learners in authentic, real-world situations. Deng et al. (2020) further note that adaptive tools make learning more personalized and meaningful, which enhances student engagement in STEAM-focused projects.

Challenges Teachers Encountered When Using TBL with Technology

Theme 1: Limited Resources and Support.

Accessibility and Resource Management emerged from codes addressing limited device access, infrastructure issues, and insufficient institutional support. Many participants expressed frustration with how technical limitations hinder effective instruction. Participant 11 noted, "Some centers do not have access to technology, so we have to rely on students' phones instead of tablets." This inconsistency in available devices leads to uneven learning experiences across classrooms. Infrastructure failures were also a significant concern. As Participant 5 explained, "One of the biggest problems is losing power all of a sudden... We have to restart the computer and turn on the TV if we lose power." Such disruptions are especially problematic in TBL environments, where tasks often require continuous access to digital tools.

Participants also raised concerns about the relevance of available digital resources. Participant 4 stated, "Even though there are a lot of resources for practicing vocab, grammar, speaking, and writing, most of them do not really match up with the topics we teach." These responses were categorized as "lack of access to devices," "infrastructure issues," and "resource misalignment," forming the broader theme of Accessibility and Resource Management. This theme highlights the challenges teachers face in ensuring that the necessary hardware and content resources are consistently available and pedagogically appropriate.

The findings align with those of Chen et al. (2019) and Kaya and Bektas (2019), who found that digital divides and unstable infrastructure limit students' and teachers' ability to participate in technology-enhanced learning fully. Hoang (2018) and Nguyen and Hoang (2020) similarly

emphasize that effective integration requires alignment between digital resources, curriculum, and assessment. When these elements do not work together, technology-enhanced TBL becomes less equitable and less effective.

Theme 2: Teaching Ineffectiveness. Teaching Effectiveness and Professional Development emerged from participants' concerns about instructional strategies, teacher readiness, and the balanced use of technology in TBL. Several participants noted that excessive or inappropriate use of digital tools can weaken classroom interaction. Participant 2 remarked, "I think some teachers may go too far by using too many games like Bamboozle or Kahoot. This could make it harder for people to really talk to each other in class." This concern reflects a core challenge in TBL—maintaining meaningful communication while sustaining engagement.

Participants also highlighted gaps in professional preparation when using technology for task-based instruction. Participant 7 explained, "New teachers may not be ready to handle task-based approaches, which could cause students to fail the task because they do not have the right scaffolding." Similarly, Participant 9 stated, "Teachers are still learning how to use technology in lesson planning." These responses were coded as "over-reliance on technology," "lack of scaffolding," and "teacher learning curve," and were grouped under the theme Teaching Effectiveness and Professional Development. The theme demonstrates how insufficient training, and improper implementation may reduce the benefits of technology-enhanced TBL.

These findings align with Meireles and Gomes (2019), who stress the need for ongoing professional development to support effective technology use. Likewise, Nguyen and Duong (2020) emphasize that teachers must develop both pedagogical and technological competence to design meaningful tasks and support learners effectively. Without adequate scaffolding and teacher preparation, even well-designed digital tools may distract rather than support learning, reinforcing the importance of continuous professional development in successful TBL implementation.

Theme 3: Student Disengagement and Unreadiness. Another theme that emerged was Student Digital Readiness and Engagement Challenges, which captures the difficulties learners face in adapting to digital platforms and maintaining engagement in technology-based TBL classes.

Participant 3 explained that some students "are not very good with technology and have trouble making accounts," noting that it may take several lessons for them to adjust. Participant 12 echoed this concern, stating that "the learning curve can be pretty steep" for students unfamiliar with certain platforms. Participant 11 also shared that "some students aren't very good with technology and find TBL hard," indicating that limited digital skills can hinder participation.

Screen fatigue was another major issue. Participant 10 noted that students "complain about how many hours they have to spend in front of screens," reflecting frustration and decreased motivation. These concerns were coded as "tech intimidation," "screen fatigue," and "digital skill gaps," forming the theme Student Digital Readiness and Engagement Challenges. These experiences align with Ellis (2019), who found that unfamiliarity with digital tools can reduce motivation and negatively affect task performance.

This theme also connects with broader issues related to resource limitations and instructional challenges. Kim and Elder (2019) and Nguyen and Duong (2020) emphasize that students without adequate technological skills or support are less likely to remain motivated and engaged in technology-enhanced learning. Without strong support systems, learners may disengage from tasks designed to promote language development. Overall, the findings show that although technology has the potential to enhance TBL in English language instruction, its effectiveness is limited when students struggle to navigate digital tools or manage screen demands.

Task-Based Learning (TBL) impacts the effectiveness of English language instruction

Theme 1: The Pedagogical shift and Technological Integration of Task-Based Learning (TBL). With a particular emphasis on the communicative approach, this topic investigated the ways in which TBL can be incorporated into pre-existing frameworks. The participant who participated said, "TBL is a natural step from the communicative approach and is popular in EFL teaching." As a result, this demonstrates that TBL is compatible with other approaches already in use. Nunan (2004) and Willis & Willis (2007) stress that structured, real-world tasks in TBL assist in the use of language communicatively and functionally. "Participant 5 said that public schools switched to local teachers for activities that required communication."

It showed how TBL has been changed to work in Vietnam. Nguyen et al. (2017) have said that this change is similar to the need to make language teaching strategies relevant to the culture and setting. The changes that have happened to TBL over time show how communication skills can be built on to meet the needs of EFL classrooms.

Theme 2: Technology as an Enhancer of Active Learning.

The point of bringing up this theme is to show how digital tools can make TBL more fun and easier for people to join in on. "Technology makes learning more fun and interesting." Participant 2 said, "At home, students can use apps to do reviews." This shows how using apps and other tools can make things easier to get to and more fun. Reinders and Wattana (2015) found that students are more likely to take part in classroom-based learning environments like TBL when they use gamification. "Using technology in TBL encourages self-learning, especially for shy students," said Participant 1. It has been shown that technology can help students of all types. Li et al. (2019) found that using digital tools and multimedia can make learning more personal and engaging. These thoughts fit well with. Technology is becoming more and more important in the classroom. TBL lets all students take part in activities that are led by other students.

Theme 3: Promoting Autonomy and Collaboration. The main point of this theme was how TBL helps people learn both alone and in groups. "I use tools like Padlet to help people learn on their own and in groups using hybrid models," Participant 3 said. This shows that people can learn on their own and with the help of others by using digital platforms. According to Deng et al. (2020), adaptive tools help people learn in a way that is more personal, which makes them more self-sufficient. Participant 9 says, "I use tools like Kahoot, Canva, and Vocaroo to combine gamification with tasks that are centered on the student." This makes people want to work together. Hitosugi et al. (2014) say that TBL that uses technology makes it easier for people to talk to each other and do their jobs better in the real world. "I focus on a communicative approach with student interaction and collaboration," said Participant 13. This backs up the social and interactive parts of TBL (Willis & Willis, 2020).

Theme 4: Resistance to Adoption of New Pedagogies.

This theme talked about people who are against the project because they have a financial stake in it. Participant 7 said,

"Parents prefer traditional methods, which makes it hard for schools to adopt TBL." This shows that people are worried about moving away from grammar-based learning. This is similar to what Nguyen and Duong (2020) discovered, which is that the expectations of parents frequently stand in the way of the development of innovative ideas in English as a Foreign Language (EFL) teacher training. It is possible that the cultural preference for teacher-centered methods could make it more difficult to implement TBL, as stated by Pham (2011).

To avoid resistance from the school, teachers must find a middle ground between progressive teaching methods and these expectations. In order for TBL to be successful in Vietnamese schools, that support must come from more than just the teachers; rather, it must come from the entire school community.

Thematic Interconnections

The four interrelated themes show a clear progression from educational philosophy to pedagogical innovation, student-centered strategies, and finally the challenges of acceptance and implementation. Together, they highlight both the potential and complexity of integrating technology into TBL, as digital tools can enhance autonomy and collaboration but may be limited by parental expectations and preferences for traditional teaching. The findings provide a holistic view of how technology-supported TBL is shaping EFL instruction in Vietnam, with teachers recognizing its alignment with communicative goals and its capacity to increase engagement and learner autonomy. However, sustained impact requires not only teacher initiative but also stronger institutional and cultural support to address external resistance and ensure effective implementation.

Integration of Qualitative and Quantitative Data Findings Using a Convergent Parallel Mixed Methods Design

This study utilized a convergent parallel mixed methods design to thoroughly investigate the degree of technology integration in Task-Based Learning (TBL) for English language instruction (Creswell & Plano Clark, 2011). A comparative matrix organizes the integration by matching mean ranks from quantitative surveys with qualitative interview themes to highlight consistencies, differences, and deeper insights.

Table 2: Comparative Matrix: Quantitative and Qualitative Data Integration

Quantitative Findings (Survey Data)	Qualitative Findings (Interview Themes)	Convergence/Divergence
High Use ($\bar{x} \geq 2.70$): SMART Boards (2.98), Kahoot! (2.91), Smartphones (2.87)	Theme 2 (Technological Integration in Instruction): Teachers frequently use interactive whiteboards, gamified tools, and mobile devices for engagement.	Convergence: Both datasets confirm high adoption of interactive and gamified tools.
Moderate Use ($\bar{x} = 1.68-2.69$): Google Docs (1.78), Grammarly (1.77), VR/AR (2.14)	Theme 1 (Limited Resources & Support): Teachers cite lack of devices, training, and alignment issues.	Divergence: Quantitative data shows low use, while qualitative data explains why (access barriers).
Low Use ($\bar{x} < 2.00$): Mentimeter (1.68), Canva (1.71), Google Forms (1.68)	Theme 3 (Student Disengagement & Unreadiness): Students struggle with tech unfamiliarity, reducing tool adoption.	Convergence: Both datasets highlight low usage due to student and teacher challenges.
High Variability ($SD > 1.0$): Laptops ($SD=1.112$), VR/AR ($SD=1.035$)	Theme 1 (Limited Resources): Disparities in school infrastructure led to inconsistent access.	Convergence: High SD reflects uneven resource distribution.
Composite Mean (2.27, $SD=0.56$): Moderate adoption overall	Theme 4 (Resistance to New Pedagogies): Parental and institutional resistance slows tech integration.	Partial Convergence: Moderate mean aligns with mixed adoption due to systemic barriers.

Comprehensive Discussion of Integrated Findings

This study used a convergent-parallel design to combine survey and interview data in examining how technology supports Task-Based Learning (TBL) in EFL instruction. Triangulated findings revealed four key areas: strong use of interactive tools, limited adoption of collaborative and immersive technologies, uneven access and digital literacy, and systemic resistance to wider implementation. These findings are discussed using evidence from both data sets and related literature.

1. High Adoption of Interactive and Gamified Tools (Convergence).

Quantitative results showed frequent use of smartphones (2.87), Kahoot! (2.91), and SMART Boards ($\bar{x} = 2.98$), which was confirmed by teachers' reports of using mobile devices, gamified platforms, and interactive whiteboards to support TBL. Teachers emphasized that these tools increase participation and motivation, a finding consistent with Xu et al. (2024) and Son, Park, and Seo (2019), who link interactive technologies to improved motivation and language skills. These results support the view that when thoughtfully integrated, digital tools are

not only widely used but also pedagogically meaningful in task-based instruction.

2. Underutilization of Collaborative and Immersive Technologies (Divergence Explained).

Although interactive tools were widely used, technologies such as Google Docs ($\bar{x} = 1.78$), Grammarly (1.77), and VR/AR platforms (2.14) showed lower levels of use. Interview data explained this underuse, citing limited infrastructure, insufficient training, and low teacher confidence, with one teacher noting that many tools do not align well with the subjects taught. Consistent with Chen et al. (2021) and Meireles and Gomes (2019), these findings indicate that effective use of collaborative and immersive technologies requires both pedagogical alignment and sustained professional development, highlighting the need for stronger institutional support to bridge the gap between availability and meaningful classroom integration.

3. Variability in Access and Digital Literacy (Convergence).

High standard deviations in the use of laptops ($SD = 1.112$) and VR/AR tools ($SD = 1.035$) indicate wide variation in technology access across schools. Interview

data confirmed these disparities, with some centers equipped with reliable internet and devices, while others depended on students' personal smartphones and showed uneven digital literacy among teachers and learners. This convergence reflects a systemic issue identified by Lai and Bower (2019), where unequal infrastructure and training lead to inconsistent technology integration. Consistent with Jung et al. (2019), the findings highlight that without adequate infrastructure, institutional support, and instructional alignment, technology use remains fragmented, positioning digital literacy as both a pedagogical and equity concern.

4. Systemic Resistance and Moderate Overall Adoption (Partial Convergence).

Although interviews revealed nuanced experiences, the composite mean of 2.27 indicates moderate overall use of educational technologies. Teachers reported that this level of use is often shaped by systemic resistance—particularly from parents who favor traditional, grammar-focused instruction—rather than by teacher preference alone. Consistent with Lai and Bower (2019), the findings show that effective technology integration in TBL requires institutional and cultural alignment; without shifts in

parental expectations and school policies, innovative practices remain uneven and difficult to sustain.

Synthesis and Strategic Implications

When considered collectively, these combined results provided a definite road map for closing present policy and practice gaps. Although there is great momentum behind the adoption of interesting and accessible tools, systematic and infrastructural constraints prevent TBL aided by technology from reaching its full potential. The following tactics were advised to help to close this gap:

Professional Development. Schools should invest in continuous, structured training that goes beyond technical skills and focuses on pedagogical integration of underused tools (e.g., Google Docs, Grammarly, VR/AR) within TBL. Such training should emphasize task design, scaffolding, and assessment to improve learner outcomes.

Infrastructure Equity. Disparities in access must be addressed through policy and funding that ensure reliable devices, stable internet connectivity, and ongoing technical support, enabling equitable participation in technology-enhanced TBL.

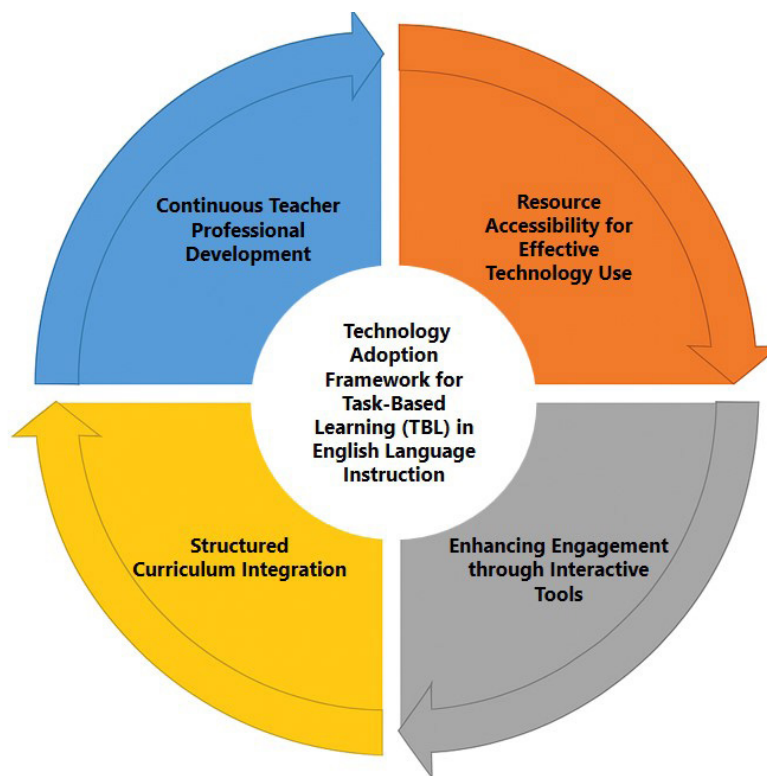


Figure 2. Technology Adoption Framework for Task-Based Learning in English Instruction

Table 2: Proposed Technology Adoption Framework for Task-Based Learning in English Instruction

Frame-work Component	1. Continuous Teacher Professional Development	2. Resource Accessibility for Effective Technology Use	3. Enhancing Student Engagement through Interactive Tools	4. Structured Curriculum Integration
Description	This ensures that teachers have the necessary skills and knowledge to effectively integrate technology into TBL.	Ensuring both teachers and students have access to necessary technological resources, including reliable hardware, apps, and internet, for effective implementation.	Strategic use of interactive tools to promote active student participation and collaboration, increasing engagement and language practice through TBL.	Align technology use with a structured curriculum that supports task-based learning, ensuring consistency and effective outcomes.
Implementation Strategies	<p>Workshops & Training: Conduct regular in-person and online workshops on tech tools and their pedagogical integration.</p> <ul style="list-style-type: none"> - Hands-on Training: Ensure training involves practical applications, allowing teachers to test tools. - Peer Mentorship: Establish a mentorship program where experienced teachers support colleagues in tech use. 	<ul style="list-style-type: none"> - Provision of Devices: Provide teachers with individual laptops, tablets, or smart TVs, and ensure students have access to essential gadgets. - Wi-Fi Accessibility: Ensure reliable and fast internet access in all teaching spaces. - App Licensing: Invest in licenses for advanced educational apps rather than relying on free versions. 	<ul style="list-style-type: none"> - Collaborative Tools: Integrate apps and Class craft to foster student collaboration and make learning more interactive. - Feedback & Tracking: Use technology to provide timely feedback, track progress, and help students self-assess. 	<ul style="list-style-type: none"> - Task Design: Create pre-designed tasks using specific apps, with clear guidelines on how these tasks meet educational outcomes. - Curriculum Support: Provide detailed curriculum plans that include technology integration and scaffold old tasks appropriately.
Timeline	Phase 1: 1-3 months for planning and initial sessions. Ongoing quarterly workshops.	Phase 1: 2-4 months for device and infrastructure upgrades.	Phase 2: 4-6 months for tool integration and training.	Phase 2: 4-8 months for curriculum design and alignment. Ongoing updates.
Persons Involved	<ul style="list-style-type: none"> - Training Department - Senior English Teachers - External Experts (as needed) 	<ul style="list-style-type: none"> - IT Department - Procurement Team - School Administration 	<ul style="list-style-type: none"> - Teachers - Students - Curriculum Designers 	<ul style="list-style-type: none"> -Curriculum Team - Teachers - Education Consultants (if necessary)
Success Indicator	<ul style="list-style-type: none"> -Increased teacher confidence in tech use. - Observable use of tech tools in lessons. - Higher participation in professional development programs. 	<ul style="list-style-type: none"> - 100% of classrooms equipped with necessary tech. - Reduced downtime due to tech issues. - Increased student access to learning apps. 	<ul style="list-style-type: none"> - Higher student participation rates. - Improved student engagement and enjoyment. - Measurable gains in language task performance. 	<ul style="list-style-type: none"> - Clearly documented tech-aligned TBL units. - Consistent use of tech across classes. - Positive feedback from teachers and students on task structure.

Stakeholder Engagement. Sustainable integration requires buy-in from parents, administrators, and other stakeholders. Orientation sessions, open-house activities, and showcases of student work can build understanding and trust in technology-supported TBL.

Technology integration in TBL is advancing but uneven. While interactive tools are widely adopted, limited access, insufficient training, and institutional resistance constrain broader implementation. Strategic investment in professional development, infrastructure equity, and stakeholder engagement is essential for meaningful and sustainable improvement.

Proposed Technology Integration Framework for Task-Based Learning (TBL)

The proposed Technology Adoption Framework guides Apollo English teachers in integrating technology effectively within a Task-Based Learning (TBL) context. It focuses on four key components: continuous teacher professional development, equitable access to digital resources, use of interactive and collaborative tools, and alignment of technology with sound pedagogy. Overall, the framework aims to support innovative teaching practices and enhance meaningful language learning outcomes. Figure 8 presents the preliminary Technology Adoption Framework for Apollo English as a strategic initiative aimed at enhancing the integration of digital tools into English language instruction, specifically aligned with the principles of Task-Based Learning (TBL).

Developed in response to key insights drawn from qualitative analysis, the framework outlines four core components: continuous teacher professional development, accessibility to essential technological resources, student engagement through interactive platforms, and structured curriculum integration. Each element is designed to address both the practical and pedagogical challenges of incorporating technology into the classroom. By focusing on teacher capacity building, providing the necessary infrastructure, leveraging interactive tools to motivate learners, and ensuring curriculum alignment, the framework seeks to create a sustainable and supportive environment for innovative language teaching at Apollo English. Below is the tabular presentation of the framework as follows.

A methodical, research-based approach meant to help the incorporation of digital technology into English language teaching via a Task-Based Learning (TBL)

framework, the Proposed Technology Adoption Framework for Apollo English four main parts make up the framework: Continuous Teacher Professional Development, Resource Accessibility for Effective Technology Use, Enhancing Student Engagement through Interactive Tools, and Structured Curriculum Integration. Every element guarantees observable and sustainable results by means of obvious implementation plans, timetables, accountable people, and specified success criteria.

1. Continuous Teacher Professional Development.

Effective technology integration in Task-Based Learning (TBL) begins with continuous teacher professional development. This component emphasizes ongoing training, hands-on practice, and peer mentorship to strengthen both technical skills and pedagogical competence. Research shows that sustained, practice-based development builds teacher confidence and supports effective technology use, fostering innovation and improved instructional practices.

2. Resource Accessibility for Effective Technology Use.

Resource accessibility is essential for effective technology integration in TBL. This component emphasizes equitable access to devices, reliable internet, and approved educational applications for both teachers and students. Research shows that digital equity and strong infrastructure are critical to improving learning outcomes, and well-equipped classrooms with minimal technical disruptions enable consistent and effective use of technology in instruction.

3. Enhancing Student Engagement through Interactive Tools.

The third component, Enhancing Student Engagement through Interactive Tools, emphasizes the use of digital platforms to promote collaboration, motivation, and active participation in TBL. Tools such as Kahoot, Blooket, and Classcraft support communicative, real-world tasks and increase behavioral, emotional, and cognitive engagement (Fredricks et al., 2004). Features like real-time feedback, self-evaluation, and progress tracking also strengthen formative assessment, as reflected in higher student participation and improved language task performance.

4. Structured Curriculum Integration.

The fourth component, Structured Curriculum

Integration, ensures that technology is embedded within a well-aligned TBL curriculum rather than used in isolation. It involves designing tasks that integrate digital tools while maintaining clear learning goals and TBL principles, supported by curriculum mapping and scaffolding. At Apollo English, consistent use of tech-aligned TBL units promotes instructional coherence, reflected in regular implementation and positive feedback from both teachers and learners.

Summary and Implications

The proposed Technology Adoption Framework offers Apollo English a clear and systematic guide for integrating technology into English language instruction. Built around four connected components teacher professional development, resource accessibility, student engagement, and curriculum integration the framework supports effective, sustainable, and innovative TBL practices. Implemented in phases, it strengthens teaching quality, enhances student learning, and positions Apollo English as a model for technology-enhanced language education.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The findings, conclusions, suggestions for further research, and proposed paths for more inquiry of the study are briefly summarized in this chapter.

Summary of Findings

Finding 1: Extent of Technology Use in TBL.

English language teachers demonstrated moderate use of technology in TBL. Interactive tools such as smart TVs, smartphones, Quizlet, Kahoot!, and SMART Boards were widely preferred for increasing engagement and supporting instruction. However, tools like Mentimeter, Canva, Prezi, and Grammarly were underused due to limited training, perceived relevance, and uneven access to devices and internet connectivity.

Finding 2: Key Uses of Technology in TBL. Teachers used technology across six main areas: collaborative tools, instructional aids, assessment platforms with real-time feedback, multimedia resources, interactive learning tools, and STEAM-based platforms. Together, these tools supported differentiated instruction, learner engagement, and effective task-based language learning.

Finding 3: Challenges in Using Technology with TBL.

Three major challenges emerged: limited resources and technical support, overreliance on technology reducing interaction, and student disengagement caused by low digital literacy and motivation. These challenges hinder consistent and effective technology integration in TBL.

Finding 4: Impact of TBL on Instructional Effectiveness.

Technology-enhanced TBL promoted learner autonomy, collaboration, and engagement compared to traditional approaches. However, broader implementation was constrained by parental resistance, cultural expectations, and infrastructure limitations.

Finding 5: Proposed Technology Integration Framework.

To address these gaps, a four-component framework was developed: continuous teacher professional development, resource accessibility, student engagement through interactive tools, and structured curriculum integration. The framework supports phased, sustainable, and scalable technology integration in English language instruction.

Conclusions

Based from the results and findings of the study, the following conclusions were drawn.

Conclusion 1: In spite of the fact that there has been a growth in the employment of technology in student-centered learning, infrastructure and teacher preparedness continue to be impediments. Assistance that is more cautious is required in order to achieve deeper integration.

Conclusion 2: Teachers can effectively employ a broad spectrum of digital resources for the purposes of cooperation, teaching, assessment, and involvement. But teachers have to use these tools more fairly and creatively if they are to get the most value from them.

Conclusion 3: There are a number of significant obstacles that prevent the successful utilization of technology in TBL. These obstacles include problems with student preparation, insufficient training, and technical constraints. Progress depends on issues being addressed.

Conclusion 4: Despite the fact that TBL is pedagogically effective and is boosted by technology, its widespread adoption in English education is slowed down by resistance from conventional stakeholders and constraints posed by

the school system.

Conclusion 5: The Technology Integration Framework that has been suggested provides a structured and evidence-based approach to addressing implementation problems and promoting effective technology-based learning delivery in environments that are resource-rich in technology.

Recommendations

Based on the findings of the study, the following nine recommendations are proposed to support effective and sustainable technology integration in Task-Based Learning (TBL) at Apollo English:

1. Formally adopt the Technology Integration Framework.

Apollo English is encouraged to officially adopt the Technology Integration Framework developed in this study as a strategic guide for implementing technology in TBL. Anchored on continuous professional development, resource accessibility, student engagement, and structured curriculum integration, the framework provides a clear, systematic, and scalable approach to technology-enhanced instruction.

2. Institutionalize the framework through policy and practice.

To ensure long-term sustainability, the framework should be embedded into institutional policies, teaching standards, and curriculum planning. This will promote consistency across centers and encourage shared responsibility among teachers, academic managers, IT staff, and curriculum designers rather than reliance on individual initiatives.

3. Strengthen continuous professional development programs.

Apollo English should prioritize structured and ongoing professional development that focuses on both pedagogical and technical competencies. Training should include hands-on workshops, classroom-based applications, and updates on emerging technologies that support TBL principles.

4. Establish peer mentoring and collaborative learning systems.

Creating mentorship programs will allow experienced teachers to guide their peers in integrating technology into TBL. Peer observation, reflective discussions, and collaborative lesson design can foster confidence, innovation, and shared best practices across teaching teams.

5. Enhance digital infrastructure and equitable access.

Reliable internet connectivity, updated classroom equipment, and access to licensed educational software are essential. Apollo English should ensure that all centers are adequately equipped to support technology-mediated TBL, reducing disparities that affect teaching quality and student participation.

6. Ensure sustained funding for technology resources.

Regular allocation of funds for software subscriptions, platform licenses, maintenance, and upgrades is necessary. Continuous investment will prevent technical disruptions and allow teachers and students consistent access to effective digital learning tools.

7. Implement a blended learning approach.

A balanced combination of face-to-face instruction and digital learning should be adopted to accommodate varying levels of digital readiness among students. Blended learning allows gradual exposure to technology while maintaining strong teacher–student interaction and supporting flexible task completion.

8. Strengthen parent and stakeholder engagement.

Apollo English should actively involve parents and stakeholders through orientations, open houses, and student showcases. Transparent communication about the benefits of technology-integrated TBL can reduce resistance, build trust, and highlight how these approaches support 21st-century skills.

9. Develop a systematic monitoring and evaluation mechanism.

A structured system for evaluating technology-enhanced TBL should be established. This may include surveys, focus groups, classroom observations, and learning analytics to track student engagement and outcomes. Regular review of these data will support informed decision-making, continuous improvement, and instructional innovation.

Implications of the Study

Educational Implications. The findings show that technology-enhanced Task-Based Learning (TBL) promotes learner autonomy, collaboration, and active engagement in English instruction. Digital tools support student-centered learning through interaction and meaningful communication. To maximize these benefits, institutions must strengthen teacher training, revise

curricula for flexible task-based learning, and align policies with learner-centered practices.

Policy Implications. The results underscore the need for policies that ensure digital equity, continuous teacher development, and collaborative curriculum design. Institutions should guarantee reliable access to digital tools and internet connectivity, mandate ongoing professional development, and encourage innovation through coordinated efforts among teachers, curriculum developers, and IT staff.

Societal Implications. The study highlights the importance of broader societal support for technology-enhanced TBL. Schools must engage parents and communities to build understanding of modern learning approaches that develop communication, digital literacy, and collaboration. Such shared support strengthens both learner outcomes and workforce readiness.

Recommendations for Further Study

Longitudinal Learning Outcomes. Future research may use longitudinal designs to examine the long-term effects of technology-enhanced TBL on language proficiency, critical thinking, and collaboration. Tracking learners over time can show whether early gains are sustained and how skills such as fluency and autonomy develop.

Comparative Contextual Studies. Comparative studies across regions or institutions (e.g., urban vs. rural, public vs. private) can reveal how infrastructure, teacher readiness, and student access influence implementation. Such research can identify transferable best practices and inform more equitable policies.

Student-Centered Perspectives. Future studies should prioritize learners' voices to understand their experiences with technology-enhanced TBL. Student feedback can clarify tool preferences, task engagement, skill development, and challenges, supporting more responsive instructional design.

AI and Adaptive Learning in TBL. Research on AI and adaptive tools can explore how personalized feedback and task adjustment support TBL. Attention to ethics, privacy, and accessibility will be essential to ensure responsible and inclusive innovation.

REFERENCES

- Arif, S., & Widodo, H. P. (2020). Managing distractions in technology-enhanced language learning. *Asian EFL Journal*, 27(2), 105–122.
- Bibauw, S., François, T., & Desmet, P. (2019). Dialogues and interactive games in language learning: A systematic review. *Computer Assisted Language Learning*, 32(8), 827–877.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Bruton, A. (2019). *The Routledge Handbook of Task-Based Language Teaching*. Routledge.
- Chen, C., & Lin, Y. (2021). Integrating a mobile learning system into a task-based English as a foreign language curriculum: Impact on language learning outcomes and learner perceptions. *British Journal of Educational Technology*, 52(1), 185–199.
- Chen, Z., Wang, B., & Sy-Miin, C. (2019). Students' technology adoption motivators, proficiency, and attitudes: A task-based language teaching perspective. *System*, 82, 1–14.
- Chong S.W., & Reinders H. (2020). Technology-mediated task-based language teaching: A qualitative research synthesis. *Language Learning & Technology*, 24(3), 70–86.
- Clarke, V., & Braun, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and Conducting Mixed Methods Research*. Sage.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- Dang, T. T., & Webb, G. (2014). The emergence of the private university sector in Vietnam: legitimate peripheral participation. *Higher Education*, 68(5), 661–678.

- 679.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319–340.
- Deng, R., Benckendorff, P., & Gannaway, D. (2020). Learner engagement in MOOCs: Scale development and validation. *British Journal of Educational Technology*, 51(1), 245-262.
- Duong, T. V. (2019). English education policy and practice in Vietnam: Challenges and innovations. *ELT Journal*, 73(2), 211–222.
- Ellis, R., & Shintani, N. (2014). Exploring language pedagogy through second language acquisition research. New York, NY: Routledge.
- Ellis, R. (2003). Task-based language learning and teaching. Oxford: Oxford University Press.
- Ellis, R. (2019). Task-based language teaching: Sorting out the misunderstandings. *International Journal of Applied Linguistics*, 29(1), 3-19.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109.
- Godwin-Jones, R. (2017). Smartphones and language learning. *Language Learning & Technology*, 21(2), 3-17.
- Golonka, E. M., Bowles, A. R., Frank, V. M., Richardson, D. L., & Freynik, S. (2014). Technologies for foreign language learning: a review of technology types and their effectiveness. *Computer Assisted Language Learning*, 27(1), 70-105.
- Gonçalves, A., & Oliveira, I. (2020). Task-Based Language Teaching: From Theory to Practice. Research-publishing.net.
- González-Lloret, M. (2017a). *The Handbook of Technology and Second Language Teaching and Learning* (1st Edition). John Wiley & Sons, Inc.
- González-Lloret, M., & Ortega, L. (2014). Technology-mediated TBLT: Researching technology and tasks. John Benjamins Publishing Company.
- González-Lloret, M., Ortega-Sánchez, D., & Piñón-Iglesias, J. A. (2020). Task design and implementation of video-based tasks in the telecollaborative context: Challenges and affordances. *System*, 95, 102342. doi: 10.1016/j.system.2020.102342
- Guo, Y., & Yang, J. (2021). The effects of automated writing evaluation on engineering undergraduates' writing performance and strategy use in a task-based language teaching curriculum. *Computers & Education*, 168, 104203. doi: 10.1016/j.compedu.2021.104203
- Hampel, R. (2006). Rethinking task design for the digital age: A framework for language teaching and learning in a synchronous online environment. *ReCALL*, 18(1), 105-121.
- Hitosugi, C. I., Schmidt, M., & Hayashi, K. (2014). Digital game-based learning (DGBL) in the L2 classroom: The impact of the UN's off-the-shelf videogame, Food Force, on learner affect and vocabulary retention. *CALICO Journal*, 31(1), 19-39.
- Hoang, V. V. (2018). The current situation and issues of the teaching of English in
- Jung, K., Lee, S., & Lee, S. (2019). Effects of the extensive use of educational technology on the learning outcomes of ESL college students. *Educational Studies in Mathematics*, 100(1), 3-22.
- Kádár, D. Z., & Ahmed, W. M. (2019). Pragmatic competence and task-based language teaching: Exploring real-world communication in the classroom. *Language Teaching Research*, 23(4), 458–475.
- Kaya, T., & Bektas, M. (2019). Digital inequality and educational outcomes: The case of Southeast Asia. *International Journal of Educational Technology in Higher Education*, 16(1), 1–14.
- Kessler, G., & Bikowski, D. (2020). The role of computer-mediated communication in the development of

second language pragmatics. In *Language Teaching and the Older Adult: Theories, Realities, and Developments* (pp. 75-94). Routledge.

Kim, E., & Elder, C. (2019). The effectiveness of task-based language teaching: A meta-analysis of quasi-experimental research. *Language Learning*, 69(1), 3-36.

Lai, C., & Bower, M. (2019). How is the use of technology in education evaluated? A systematic review. *Computers & Education*, pp. 133, 27–42.

Lee, L. (2016). Autonomous learning through task-based instruction in fully online language courses. *Language Learning & Technology*, 20(2), 81–97.

Li, C., Cheng, H., & Tsai, C. (2019). A critical review of using augmented reality in education from 2011 to 2018. *Applied Sciences*, 9(14), 2924.

Liu, H., & Wang, X. (2020). An empirical investigation of task-based learning in a virtual reality environment. *Computers & Education*, 154, 103967. doi: 10.1016/j.compedu.2020.103967

Meireles, L., & Gomes, M. J. (2019). Teachers' perceptions and intentions regarding the use of digital tools: impacts on the implementation of task-based language teaching. *Education and Information Technologies*, 24(4), 2633-2655.

Ministry of Education and Training (2013). "Circular No. 30/2013/TT-BGDĐT. Website

Ministry of Education and Training (2013). *Law on Higher Education: Law No. 34/2018/QH14.* Vietnam: Ministry of Education and Training.

Ministry of Education and Training (2013). *Law on Science and Technology: Law No. 81/2013/QH13.* Legal Documents on Educational Science. Vietnam: Ministry of Education and Training.

Ministry of Education and Training of Vietnam (2018). Circular No. 08/2018/TT-BGDĐT on foreign language teaching and Learning Activities in Vietnam."

Mirhassani, S. A., & Borjian, M. (2020). Task-

Based Language Teaching: A Critical Appraisal of its Main Features and Guidelines. *English Language Teaching*, 13(4), 32-41.

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017-1054.

Morse, J. (1991). Strategies for sampling. In J. M. Morse (Ed.), *Qualitative nursing research: A contemporary dialogue* (pp. 127-146). Newbury Park, CA: Sage.

Nguyen, H. T., & Duong, T. H. O. (2020). Professional development for teachers in the context of English language teaching reforms in Vietnam. *The Journal of Asia TEFL*, 17(1), 41- 56.

Nguyen, H. T., & Hoang, L. (2020). Communicative language teaching in Vietnam: teachers' beliefs and practices. *Language, Culture and Curriculum*, 33(2), 196-214.

Nguyen, N. T., McInnis-Bowers, C., & Baharum, Z. A. (2017). Cultural differences in student learning: a qualitative study of Vietnamese and American business students. *The Journal of International Education in Business*, 10(2), 133–152.

Nguyen, T. H., Nguyen, T. H., Nguyen, T. H., & Nguyen, T. H. (2021). Exploring teachers' experiences and perspectives in implementing Task-Based Learning with technological tools: A case study at Apollo English. *Journal of Language and Technology*, 15(2), 45-58.

Nunan, D. (2004). *Task-based language teaching.* Cambridge: Cambridge University Press.

Pham, H. H. (2011). An investigation of perceptions of Vietnamese teachers and students toward cooperative learning (CL). *International Education Studies*, 4(1), 3–12.

Prabhu, N. S. (1987). *Second Language Pedagogy.* Oxford University Press.

Reinders, H., & Wattana, S. (2015). Affect and willingness to communicate in digital game-based learning.

ReCALL, 27(1), 38-57.

Reinhardt, J. (2019). Social media in second and foreign language teaching and learning: Blogs, wikis, and social networking. *Language Learning & Technology*, 23(1), 1-14.

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.

Saigoneer. (2020, November 18). Vietnam drops to 65th out of 100 countries in English proficiency ranking. <https://saigoneer.com/saigon-news/19743-vietnam-drops-to-65th-out-of-100-countries-in-english-proficiency-ranking>

Sholeh, M., Nur, S. & Salija, K. (2020). Task-Based Learning (TBL) in EFL Classroom: from theory to practice. *International Journal of Humanities and Innovation (IJHI)*, 3. 139-144. 10.33750/ijhi.v3i4.97.

Skehan, P. (1996). A Framework for the Implementation of Task-Based Instruction. *Applied Linguistics*, 17(1), 38–62.

Son, J. B., Park, J. R., & Seo, Y. J. (2019). The effectiveness of mobile English applications on vocabulary acquisition, listening, and speaking proficiency. *International Journal of Mobile Learning and Organisation*, 13(2), 139-155. <https://doi.org/10.1504/IJMLO.2019.098608>

Stoller, F. L. (2006). Establishing a theoretical foundation for project-based learning in second and foreign language contexts. *Project-based second and foreign language education: Past, present, and future*, 19-40.

Teo, T. (2009). Modeling technology acceptance in education: A study of pre-service teachers. *Computers & Education*, 52(2), 302–312.

Truong, T. M., & Tran, L. T. (2014). Students Intercultural Development through Language Learning in Vietnamese Universities: A Case Study on the Intercultural Tensions Revealed Through Kulturshock. *Language and Intercultural Communication*, 14(2), 242-261.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.

Willis, D., & Willis, J. (2007). *Doing Task-Based Teaching*. Oxford University Press.

Willis, J. & Willis, D. (2020). *Task-Based Language Learning in the 21st Century* .

Willis, J. (1996). *A framework for task-based learning*. Longman.

Willis, J., & Willis, D. (2012). *Task-based language learning and teaching*. Oxford University Press.

Winke, P., & Gass, S. (2019). *The Routledge handbook of second language acquisition and technology*. Routledge.

Xu, Y., Zhu, J., Wang, M., Qian, F., Yang, Y., & Zhang, J. (2024). The Impact of a Digital Game-Based AI Chatbot on Students' Academic Performance, Higher-Order Thinking, and Behavioral Patterns in an Information Technology Curriculum. *Applied Sciences*, 14(15), 6418.

Ziegler, N. (2016). Taking technology to task: Technology-mediated TBLT, performance, and production. *Annual Review of Applied Linguistics*, pp. 36, 136–163.