THE INTERGRATION OF TECHNOLOGICAL TOOLS IN ENGLISH LANGUAGE TEACHING

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ARTICLE INFO	ABSTRACT
	This article investigates the integration of technological tools in English teaching, covering pedagogical approaches, types of technological tools used, and the challenges faced by English teachers. Employing a quantitative research design, the study collected and analyzed numerical data through structured questionnaires, providing insights into the primary technological tools used, encountered challenges, and preferred pedagogical approaches. The findings highlighted the widespread adoption of technology among English teachers, with key tools offering enhanced teaching possibilities but also posing challenges. Besides, Blended learning stood out as the preferred pedagogical approach. The study underscored the need to address these challenges and enhance English teaching through technology.

SỰ TÍCH HỢP CÁC CÔNG CỤ CÔNG NGHỆ TRONG VIỆC DẠY TIẾNG ANH

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THÔNG TIN BÀI BÁO	TÓM TẮT
	Bài báo nghiên cứu việc tích hợp các công cụ công nghệ trong việc dạy tiếng Anh, bao gồm phương pháp giảng dạy, công cụ công nghệ được sử dụng và những khó khăn mà giảng viên phải đối mặt. Sử dụng phương pháp nghiên cứu định lượng để thu thập và phân tích dữ liệu số liệu thông qua các bảng câu hỏi có cấu trúc, cung cấp thông tin về các công nghệ chính được sử dụng, những khó khăn mà giáo viên gặp phải và các phương pháp giảng dạy áp dụng công nghệ có hiệu quả nhất. Kết quả nghiên cứu làm nổi bật sự phổ biến của công nghệ trong giảng dạy tiếng Anh, với các công cụ quan trọng cung cấp nhiều cơ hội giảng dạy nhưng cũng đặt ra những thách thức. Phương pháp học kết hợp là phương pháp giảng dạy áp dụng công nghệ hiệu quả nhất. Nghiên cứu cũng nhấn mạnh sự cần thiết giải quyết những khó khăn được và đưa ra các giải pháp để tăng cường việc giảng dạy tiếng Anh sử dụng công nghệ.

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1. Introduction

In today's digital and interconnected society, the integration of technological tools has become a prominent aspect of education. English language teaching, as a vital component of language acquisition, has undergone a significant transformation through the incorporation of technology. The utilization of technological tools in teaching English holds the potential to enhance teaching methods, engage students in interactive learning experiences, and facilitate the development of language proficiency and acquisition. Obviously, some studies have investigated the impact of technological tools on language learning outcomes, highlighting their potential to enhance students' language proficiency and acquisition and one of the most significant one by Hwang and Wu (2019) [1] who examined the effects of computer-assisted language learning (CALL) on English language learning. The analysis revealed that CALL interventions significantly improved students' speaking, writing, and listening skills. Additionally, research has shown the positive impact of specific technological tools on language learning. For instance, interactive whiteboards have been found to enhance student engagement and participation, leading to improved language acquisition [2]. Similarly, the use of mobile applications and gamified language learning platforms has been linked to increased motivation, engagement, and vocabulary acquisition [3].

The integration of technology enriches English language teaching through various avenues, including multimedia resources, online platforms, and language learning applications, virtual reality simulations, and intelligent tutoring systems. These tools provide opportunities for authentic language practice, personalized learning experiences, and immediate feedback, all of which contribute to the enhancement of language skills. Furthermore, the integration of technological tools in English teaching paves the way for increased student engagement and motivation. Interactive and gamified features in technology-enabled resources capture learners' interest, making language learning a more enjoyable and meaningful experience. Collaborative activities and online platforms enable students to engage in peer-to-peer interactions and global communication, further bolstering their language skills and intercultural competence. Task-based language teaching (TBLT) has also been explored as a pedagogical approach for integrating technological tools. TBLT encourages learners to engage in meaningful and authentic tasks, supported by technology, to develop their language skills [4]. This approach promotes student-centered learning and facilitates language use in real-life contexts.

Nevertheless, integrating technological tools into English language teaching is not without challenges. One common challenge is the lack of teacher training and professional development in utilizing these tools effectively [5]. Teachers may face difficulties in understanding how to select appropriate tools, integrate them into the curriculum, and provide meaningful learning experiences. Furthermore, access to technology and digital resources can be a barrier, particularly in resource-constrained contexts [6]. Limited access to devices, reliable internet connectivity, and digital literacy skills among students and teachers may hinder the successful integration of technological tools.

To address these challenges and promote successful integration, various pedagogical approaches and strategies have been suggested. Blended learning, combining online and face-to-face instruction, has gained prominence as an effective approach. It allows for a balance between traditional teaching methods and technology-enabled activities, fostering interaction, collaboration, and personalized learning experiences [7].

Moreover, fostering a learner-centered environment and providing opportunities for active engagement and collaboration can enhance the integration of technological tools. Student-generated content, multimedia projects, online discussions, and peer collaboration through technology platforms contribute to increased motivation and engagement [8]. Besides, the effectiveness of online teaching of the group of lecturers who used a lot of information technology applications was higher than that of the group of lecturers who rarely used

information technology [9]. Moreover, the study [10] stated that the process to design the vocabulary lessons on Quizlet and vocabulary reading practices on Edmodo website, and then experiment these vocabulary learning activities on the experimental group. The result said that there is a significant improvement in vocabulary knowledge in experimental group in comparison with the control one.

From the studies mentioned above, it can be seen that all the studies recognize the potential benefits of integrating technological tools into English teaching, including enhanced learning outcomes, increased engagement, and improved language skills. Besides, they acknowledge the challenges associated with technology integration, such as teacher training, appropriate tool selection, and access to technology and digital resources. However, the studies vary in their specific focus areas, such as CALL [1], interactive whiteboards [2], mobile applications and gamified platforms [3], TBLT [4], teacher training [4], and access to technology [6]. Some studies concentrate on the positive impact of specific tools or approaches, while others address challenges and barriers to technology integration. In addition to this, the studies span different years, reflecting evolving technology and teaching practices, which may influence their findings and recommendations.

For those reasons, this article is to explore the integration of technological tools in English language teaching in terms of pedagogical approaches and types of technological tools used by the teachers and teachers' challenges and barriers in integrating these tools in Thai Nguyen province.

1. What are the challenges and barriers faced by teachers in integrating technological tools into English language teaching?

2. What pedagogical approaches and the type of technological tools effectively promote the successful integration of technological tools in English language teaching?

2. Research methodology

The research methodology employed in this study adopted a quantitative research design, aiming to collect and analyze numerical data concerning the integration of technological tools in the context of English language teaching. This method involved the distribution of structured questionnaires with predefined response options to gather insights into the primary types of technological tools integrated, the challenges encountered, and the preferred pedagogical approaches for their integration. The study selected a sample of 100 English teachers in which 60 teachers from Thai Nguyen University and 40 teachers various high schools in Thai Nguyen and province as participants during academic year 2022-2023. Data collection is facilitated through online questionnaires, and descriptive statistics, such as percentages and frequencies, will be computed to assess challenges, barriers, and favored pedagogical approaches. The questionnaire comprises two distinct sections: Integration of Technological Tools evaluates the extent of technological tool integration in English language teaching. The last part is Challenges and Barriers which explores the specific challenges and barriers faced during the integration of technology and identify the pedagogical approaches and types of technological tools that facilitate successful integration in English language teaching.

3. Results and discussion

3.1. The challenges and barriers faced by teachers in integrating technological tools into English teaching

The survey data shown in Figure 1 highlighted the challenges and barriers confronted by teachers when incorporating technological tools into English teaching. A staggering 87% of participants express that they grappled with insufficient time for lesson planning, which emerged as the foremost challenge. This time constraint could impede their ability to effectively integrate technology, as such integration demands additional planning and preparation.

Another significant barrier was the limited budget for acquiring necessary technology tools, as noted by 78% of participants. This constraint was apparent, hindering teachers from accessing and implementing the latest technological resources, potentially diminishing the benefits of technology in the classroom.

Technical issues, such as software problems and connectivity disruptions, were a common challenge for 67% of participants. These issues could disrupt the seamless integration of technology in teaching, causing frustration and wasted classroom time, thereby affecting the overall effectiveness of technology use.

Additionally, more than half of the participants (56%) faced difficulty in finding high-quality digital resources, which were vital for effective teaching with technology. This scarcity could compromise the overall quality of instruction.
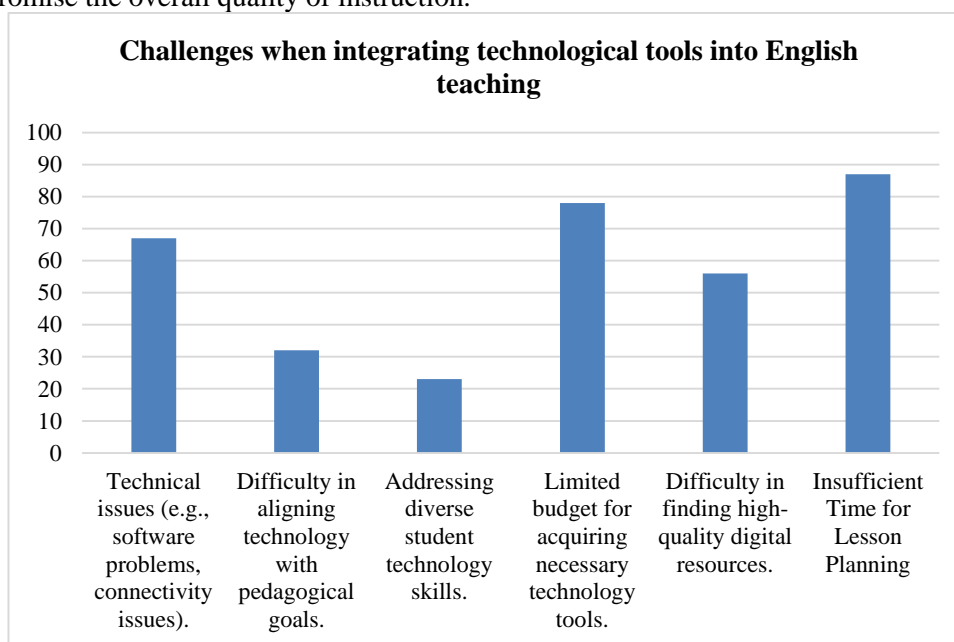

Figure 1. *The challenges faced by teachers in integrating technological tools*

However, only about one-third of participants (32%) perceive difficulty in aligning technology with pedagogical goals. This suggested a potential misalignment between technology use and desired learning outcomes, indicating a need for better integration strategies.

Lastly, addressing diverse student technology skills was recognized as a challenge by a smaller percentage of participants (23%). This underscored the necessity for teachers to adapt their teaching methods to accommodate students with varying levels of technology proficiency.

In summary, the data illustrated that teachers encounter several challenges and barriers when integrating technological tools into English teaching. The most prominent concerns included insufficient time for lesson planning, limited budgets, and technical issues. Addressing these challenges may necessitate investments in professional development, technology infrastructure, and the provision of high-quality digital resources to support teachers in enhancing English language instruction through technology.

3.2. The pedagogical approaches when integrating technological tools in English teaching

The data in Figure 2 pertaining to pedagogical approaches for integrating technological tools into English teaching yielded several noteworthy insights. Foremost, it was evident that blended learning stands out as the preferred approach, garnering resounding support from 87% of educators. This widespread endorsement underscored its potential to significantly elevate the quality of

English language instruction. Blended learning (BL) seamlessly marries traditional face-to-face teaching with online resources, offering students a learning experience that is both adaptable and tailored to their individual needs, rendering it a potent method for language education.

Following closely, gamification (G) emerged as the second most popular choice, acknowledged by 67% of respondents for its effectiveness. This indicated a substantial consensus among educators regarding the value of gamification in enhancing English language teaching through technology. By employing game-like elements, this approach engaged students and motivated them to actively practice language skills, infusing the learning process with enjoyment and interactivity.

While project-based learning (PBL) was recognized as effective by 43% of teachers, it did not command the same level of favor as blended learning or gamification. This method involved students in real-world projects to cultivate language skills, although it may necessitate greater resources and planning compared to other approaches.

Task-based learning (TBL) methods, selected by 34% of respondents, retain their significance for a considerable portion of teachers. These methods encouraged learners to engage in meaningful and authentic tasks, supported by technology, to develop their language skills. This approach promoted student-centered learning and facilitated language use in real-life contexts.

Inquiry-based learning (IBL) garners supported from 25% of respondents, indicating some appeal, though it lacked the popularity of the top choices. This approach encouraged students to independently ask questions and explore topics, fostering critical thinking and language skills, but it may be perceived as less aligned with technology integration.
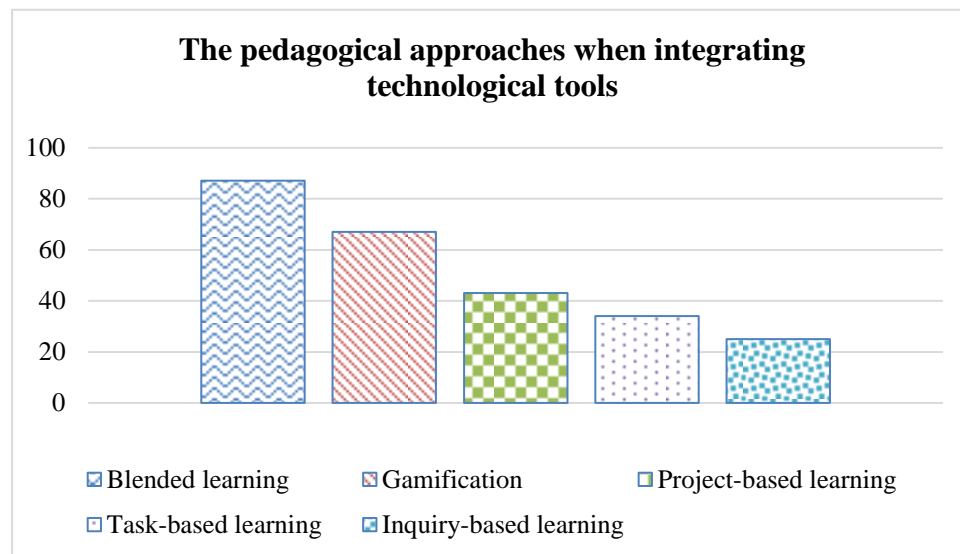

Figure 2. *The pedagogical approaches when integrating technological tools*

In conclusion, the data overwhelmingly supported the notion that blended learning stood as the most effective method for integrating technological tools into English teaching, as endorsed by 87% of teachers. This consensus underscored the widespread belief among educators that the integration of in-person instruction with online resources held great promise for enhancing language learning outcomes in the digital age.

3.3. The main type of technological tools integrated in English teaching

The data in Figure 3 indicated that a significant majority of teachers, specifically 82%, have integrated technological tools into their English teaching methods. This high percentage suggested a prevalent and widespread adoption of technology in the field of English language education.

The data provided valuable insights into the primary types of technological tools integrated by teachers into their English teaching methods. Among the surveyed educators, Educational Apps stood out as the most widely adopted tool, chosen by a significant 75%. These apps, represented by examples like Duolingo and Kahoot, were favored for their interactive and engaging features, enriching the learning experience for students.

Following closely behind, Video Conferencing Tools were embraced by 42% of teachers. Platforms such as Zoom and Meet have gained prominence, particularly during the COVID-19 pandemic, by facilitating remote teaching and virtual classrooms, thereby enabling educators to maintain the continuity of education.

Learning Management Systems (LMS) played a significant role, with 38% of teachers integrating them into their teaching. LMS platforms like Moodle and Blackboard serve as effective means for organizing course materials and supporting online learning experiences.

Moreover, Social Media platforms were chosen by 32% of teachers to foster communication, collaboration, and content sharing among students, showcasing educators' adaptability in leveraging familiar online spaces for educational purposes.

Additionally, Interactive Whiteboards were employed by 20% of teachers, enhancing engagement through interactive and visually immersive learning experiences. Meanwhile, Online Language Learning Platforms, such as Rosetta Stone, were selected by 12%, providing structured language courses and exercises.
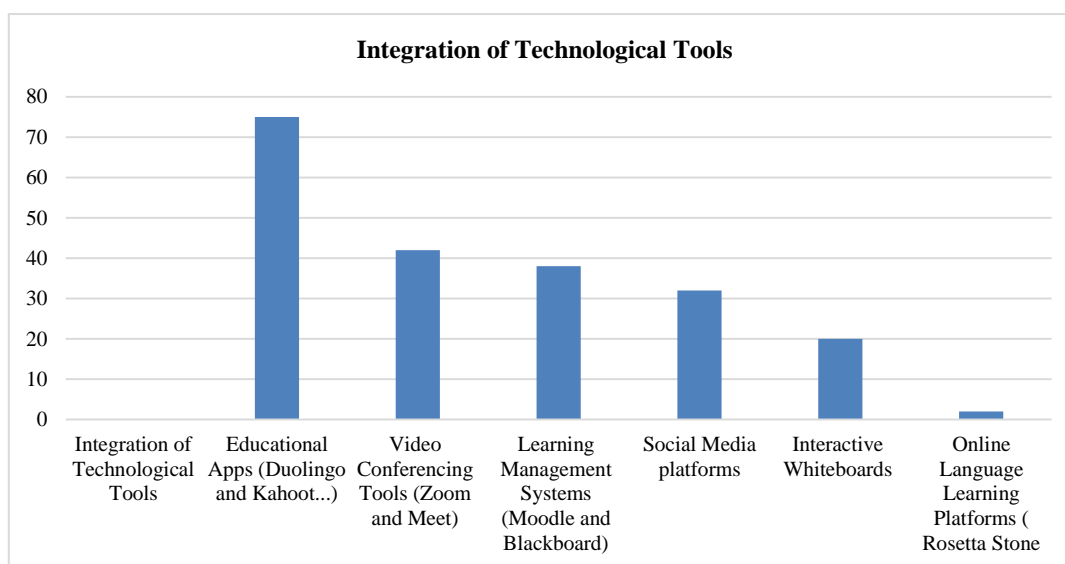

Figure 3. *The integration of Technological tools in English teaching*

In summary, the data underscored the diverse array of technological tools employed by teachers in English teaching. Educational apps and video conferencing tools were the most prominent choices, while learning management systems, social media, interactive whiteboards, and specialized language learning platforms also played pivotal roles in enhancing the quality and effectiveness of language instruction.

4. Conclusion

The study's findings provide valuable insights into the integration of technological tools in English teaching, demonstrating the widespread adoption of technology within this educational sphere. English teachers have embraced a range of key tools, including Educational Apps, Video Conferencing Tools, Learning Management Systems (LMS), Social Media platforms, Interactive Whiteboards, and Online Language Learning Platforms. While these tools present innovative

teaching possibilities, they also present challenges. Notably, teachers also grapple with time constraints, limited budgets, technical issues, and the quest for high-quality digital resources, all of which pose significant hurdles.

In terms of pedagogical approaches, the study reveals that blended learning garners strong support as the most effective method for integrating technological tools, followed closely by gamification. These approaches enhance engagement and cater to diverse learning needs. While project-based learning, task-based learning, and inquiry-based learning also have their merits, they are not as widely favored in this context.

In summary, this study underscores the pressing need for investments in teacher training, technology infrastructure, and access to high-quality digital resources to address challenges and facilitate effective English language instruction through technology.

Recommendation

To effectively address the challenges and harness the potential of technological tools in English language teaching, a series of recommendations are proposed. Educational institutions and policymakers should prioritize comprehensive professional development programs for teachers, equipping them with the requisite skills and strategies for effective technology integration. Adequate budget allocations are crucial to acquire essential tools and resources. Moreover, investments in robust technology infrastructure and support mechanisms can alleviate technical issues. Foster student-centered learning and teaching experiences by using technology to create interactive and collaborative activities. Lastly, creating a curated repository of high-quality digital resources tailored to English teaching can elevate instructional quality and align with pedagogical goals. Implementing these recommendations can create a more conducive environment for technology-enhanced language education.

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