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Telegram as a Digital Learning Tool: Transforming Language Education

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Article Info

Abstract

The integration of digital technologies into learning environments enables more efficient coordination between teachers and learners, overcoming physical and temporal barriers that often limit access to educational opportunities. This study investigates the use of Telegram as a mobile-based digital learning tool (DLT) to support undergraduate students in English language learning. Specifically, it examines learners' perceptions of Telegram's role in facilitating language acquisition and identifies challenges encountered during its use. Language learning materials were delivered through Telegram, accompanied by guided online discussions. Undergraduate participants were engaged with the materials, completed questionnaires, and participated in semi-structured interviews conducted via the online learning platform. Findings indicate that Telegram provides accessible English communication materials that promote frequent practices and sustained exposure to new language input. Its flexible, self-paced structure helped reduce time and space constraints, enabling deeper comprehension of learning content for the learners. Despite minor challenges related to engagement and navigation issues, learners perceived Telegram as a valuable support for language development.

The study recommends broader institutional adoption of decentralized and accessible digital tools to enhance linguistic instructions and align teaching practices with contemporary technological advancements.

1. Introduction

Education in Malaysia has long been rooted in conventional, teacher-centered practices, commonly characterized by classroom-based instructions and textbook-driven learning (Ministry of Education, 1999). Higher learning institutions have begun shifting toward more flexible, student-centered pedagogies due to rapid advancements in information and communication technology. Digital platforms such as Zoom, MS Teams, Instagram, and Telegram now allow learners to engage interactively, collaborate with peers, and access materials beyond the traditional boundaries of time and space constraints.

In the realm of English as a Second Language (ESL) and English as a Foreign Language (EFL), technology has become increasingly vital. Modern digital tools offer dynamic learning experiences that encourage communication, participation, and autonomy in language acquisition. Virtual learning systems integrate both real-time and asynchronous interactions, allowing learners to engage in continuous, self-paced learning while benefiting from collaborative exchanges. These tools help bridge geographic barriers, enrich learning environments, and respond to the global shift toward digital literacy and the 21st-century skills in technology.

Despite these advancements, the pedagogical use of mobile applications, particularly Telegram remains insufficiently explored within Malaysian ESL contexts. Telegram is widely used for communication and file sharing, yet its potential as a structured digital learning tool (DLT) for language development has not been fully examined. There is limited empirical evidence regarding how learners interact with ESL content on Telegram, how they perceive its usefulness, and what challenges arise when using it for academic purposes.

1.1 Research Problem

Although digital technologies are increasingly integrated into Malaysian higher learning institution environment, the role of Telegram as a platform for supporting ESL learning has not been adequately investigated. Understanding its effectiveness, student experiences, and potential limitations is essential for determining its viability as a learning tool in Malaysian ESL context.

1.2 Research Objectives

This study aims to;
- Examine how Telegram supports undergraduate students' English language learning processes.
- Investigate learners' perceptions of using Telegram as a digital learning tool (DLT) in an ESL context.
- Identify the challenges students encounter when engaging with ESL materials through Telegram.

2. Literature Review

Telegram has gained significant attention in the recent past years as a mobile-based learning platform due to its scalability, multimedia delivery, and user-friendly interface. Its features such as large group capacity, cloud-based storage, fast messaging, and uninterrupted media sharing makes it a potentially powerful tool for language education. Early studies highlighted how mobile devices enhance learners' access to educational materials, but more recent research has examined how Telegram specifically supports language acquisition within ESL and EFL contexts (Fazilawati & Supyan, 2017). Another notable point made by Isora (2021) relates to Telegram's emphasis on security; the platform's end-to-end encryption is presented as a safeguard for sensitive user data and academic exchanges. The study also highlights that Telegram bots and automation tools can streamline administrative tasks and minimize educators' workload.

Kelly (2021) demonstrated that Telegram's affordances such as bot-supported learning tasks, personalized content feeds, and access to native speaker communities enable authentic language use and autonomous learning. Telegram's built-in voice messaging and translation functions have also been shown to support speaking practices and cross-linguistic communication, making language learning more interactive and socially oriented. Wirdiyanto and Doyanto (2021) examined the integration of Telegram in online teaching and emphasized its practicality for educators due to its user-friendly design, affordability, and flexible accessibility. Their findings suggest that Telegram's group chat functions can promote meaningful interactions among learners and strengthen classroom collaboration in digital environments. They also noted that the platform's multimedia-sharing capabilities including images, voice notes, and videos enriching instructional delivery and improve students' engagement when compared to conventional online platforms.

Recent research also underscores educators' growing acceptance of Telegram as a teaching tool. Sevnarayan (2023), for example, found that lecturers considered Telegram effective for increasing students' motivation and interactions in academic writing courses. Similarly, Alabbasi (2021) established that Telegram functions effectively as a lightweight learning management system (LMS), supporting efficient communication, file sharing, and virtual classroom management even in low-resource situations. These findings suggest that Telegram's flexibility enables both synchronous and asynchronous learning, thus improving access and continuity in educational settings. Khajavi and Eslami Rasekh (2021) concluded that Telegram offers meaningful pedagogical potential for vocabulary development, although they advised that additional research is needed to explore its effectiveness in teaching other language competencies and to address technological and instructional constraints.

Numerous studies have examined Telegram beyond general usage, focusing more specifically on language learning outcomes. Nazirah and Amelia (2022) confirmed that Telegram enhances ESL writing activities by fostering peer interactions, enabling flexible feedback exchange, and supporting student autonomy in distance learning environments. Khan and Nazim (2021) reported that both teachers and students perceived Telegram as beneficial for vocabulary development, grammar practices, and overall English proficiency. Dollah et al. (2021)

further demonstrated that Telegram apps supported activities thus improved students' writing skills including spelling, punctuation, vocabulary choice, and creativity highlighting measurable gains in learners' written output.

Akbulut and Kara (2021) revealed that students frequently relied on Telegram, often weekly in order to interact with lecturers and classmates, exchange learning materials, and clarify coursework queries. Participants reported several advantages, including ease of access, user-friendly features, and improved communication flow across the learning community. Alharthi and Alqahtani (2020) findings indicated that the application contributed to higher levels of learner motivation, participation, and overall performance. The interactive functions within Telegram such as group discussions, multimedia exchanges, and quick-response tasks were reported to enhance students' engagement with course materials and promote collaborative learning.

Other studies have emphasized Telegram's role as a complementary or supplemental learning tool. Abu-Ayfah (2019) reported that young EFL learners improved their language skills due to the platform's accessibility and supportive interface, though issues such as exposure to non-academic content and technical constraints occasionally hindered learning. Likewise, Alahmad (2020) found that Telegram enhanced learner engagement, vocabulary growth, and grammatical competence through interactive messaging, multimedia sharing, and peer-instructor communication. However, challenges such as distraction, limited instructor feedback, and privacy concerns were also identified, suggesting the need for structured pedagogical strategies when integrating Telegram into formal ESL instructions. Strengthening educators' digital skills could enhance teaching effectiveness and improve the quality of teacher education programs (Amhag, Hellström, and Stigmar, 2019). Mohammed (2019) suggests that the educational value of technology is largely dependent on how it is implemented. When used strategically, digital tools can enrich learning environments; however, excessive reliance or poor application may impair learners' cognitive and socio-emotional growth.

Smith (2022) critically examined the changing role of technology in modern education, arguing that digital innovation has transformed traditional learning models by promoting greater accessibility and interaction. The author stated that educational technologies contribute to improved student engagement, collaborative learning, and the development of critical thinking abilities. Despite these benefits, Smith highlighted that the integration of technology into instructional settings is often hindered by insufficient infrastructure and a lack of teacher training.

Collectively, these findings indicate that Telegram offers meaningful benefits for ESL/EFL learning particularly in terms of accessibility, collaboration, learner motivation, and skills development. Yet, despite its increasing popularity, critical gaps remain. Much of the existing literature focuses on general perceptions or isolated skill improvements, with fewer studies examining Telegram as a comprehensive digital learning tool (DLT) within Malaysian higher learning institutions. Additionally, concerns related to privacy, content management, and instructional design remain insufficiently addressed. Eventually, recent research highlights Telegram's promise while underscoring the need for deeper investigation into how undergraduate learners engage with the platform for holistic language development and what challenges they encounter during sustained use.

3. Methodology

This study employed a mixed-methods research design that combined quantitative and qualitative approaches to provide a comprehensive understanding of undergraduate learners' experiences with Telegram as a digital learning tool (DLT). The quantitative component consisted of a questionnaire that measured learners' perceptions and usage patterns, whereas the qualitative component involved semi-structured interviews designed to elicit deeper insights and contextual explanations. This design allowed for methodological triangulation and strengthened the validity of the findings.

3.1 Participants and Sampling Procedure

The participants were 40 undergraduate students enrolled in an English language course at a Malaysian higher learning institution. A convenience sampling strategy was used due to the accessibility and direct involvement of these students in Telegram-based learning activities. Convenience sampling was deemed appropriate for this exploratory study, as the primary aim was to gather timely and relevant feedback from active users of the platform.

3.2 Instruments

Two instruments were used to collect data:

3.2.1 Questionnaire

The questionnaire consisted of closed-ended items measured on a 5-point Likert scale to assess students' perceptions of Telegram's usefulness, ease of use, engagement features, and overall effectiveness. Demographic items and questions related to usage frequency were included to contextualize the quantitative findings.

3.2.2 Semi-Structured Interviews

Semi-structured interviews were conducted via Telegram to align with participants' natural mode of interaction. The interview protocol included open-ended questions focusing on learners' perceived benefits, challenges encountered, learning behaviors, and suggestions for improving the use of Telegram in ESL instruction. This flexible format allowed for probing and clarification where necessary.

3.3 Data Collection Procedures

Data collection occurred in two phases. First, participants completed the online questionnaire. Second, a subset of participants volunteered for semi-structured interviews using Telegram's messaging and voice features. Conducting data collection within the same platform used for learning enhanced ecological validity and ensured familiarity for participants.

3.4 Data Analysis

Quantitative data from the questionnaires were analyzed using descriptive statistics, including frequencies, percentages, means, and standard deviations, to identify general trends in students' perceptions and usage behaviors.

Qualitative data from the semi-structured interviews were analyzed using thematic analysis. Interview transcripts were coded inductively to identify recurring patterns and emerging themes related to learners' experiences with Telegram. Themes were compared with the quantitative results and complementarity between the data sets.

4. Findings

This study examined learners' familiarity with Telegram as a digital learning tool, their engagement in idea and information exchange, readiness to participate in online learning, frequency of online participation, self-directed learning behaviors, and perceived constraints and opportunities associated with using Telegram for language learning. Table 1 summarizes key descriptive findings.

4.1 Learners' Familiarity with Telegram

Most learners reported being comfortable and familiar with using Telegram for academic purposes. A total of 31 students (77.5%) indicated that they enjoyed using Telegram as an alternative platform to supplement face-to-face learning. Learners highlighted that the platform made it easier to access learning materials, complete tasks, and interact with peers. Overall, participants perceived Telegram as a useful tool that supported their language-learning needs and enhanced their engagement beyond classroom time.

4.2 Exchanging Ideas and Information

All 40 learners (100%) reported that Telegram enhanced the exchange of ideas and information among classmates. Learners felt more confident communicating in English, noting improvements in writing, pronunciation, and general language proficiency. The chat features, multimedia options, and informal environment encouraged participation and reduced anxiety when practicing English. Several learners also mentioned receiving helpful updates on course matters, general information, and even job opportunities shared by peers.

4.3 Readiness to Participate

Learners demonstrated a high level of willingness to contribute to online discussions. Thirty-five students (87.5%) indicated that they regularly shared relevant learning materials, meaningful content, and course-related information via Telegram. Participants emphasized that they preferred to send only useful messages that contributed to collective learning and supported group discussion.

4.4 Frequency of Online Participation

All respondents reported accessing the internet during their free time and responding promptly to peers' Telegram posts. Although students initially described their communication ability as moderate, they stated that their interaction frequency and confidence improved through consistent online engagement within the Telegram group.

4.5 Seld-Directed Learning

All learners agreed that Telegram facilitated independent learning outside the classroom. They described the platform as accessible, convenient, and helpful for reviewing materials at their own pace. Students appreciated that Telegram removed time and space limitations, allowing them to engage with content anytime and anywhere. Many reported gaining additional learning resources, receiving faster feedback than in traditional classes, and developing greater self-confidence and autonomy in language learning.

4.6 Problems and Opportunities Encountered

Learners reported minimal challenges when using Telegram. Most were already familiar with the application and relied on mobile data to stay connected. The only notable constraint was occasional slow internet speed. Despite this, learners expressed strong satisfaction with Telegram as a learning platform. They believed it simplified language learning, made communication easier, and supported task completion. Students also indicated that they would willingly use Telegram in future courses due to its convenience and supportive learning environment.

Table 1 *Descriptive summary of learner responses (N = 40)*

Category	n	%
Familiarity with Telegram	31	77.5%
Exchanging ideas & information	40	100%
Readiness to participate	35	87.5%
Frequency of participation	40	100%
Self-learning	40	100%

5. Discussion

The purpose of this study was to explore learners' experiences and perceptions of Telegram as a digital learning tool for English language acquisition. The results demonstrate that Telegram played a supportive, motivating, and pedagogically valuable role throughout the course.

Learners' strong familiarity with Telegram contributed to a seamless integration of the application into the learning process. Consistent with previous research on digital learning tools, students felt more engaged when materials were easily accessible and communication was simplified. Telegram's features such as chat messages, multimedia options, and group discussion supported informal learning and contributed to the creation of a collaborative learning environment.

A major finding was that Telegram facilitated meaningful exchange of ideas and information. All learners acknowledged improvements in their confidence and willingness to use English, aligning with studies suggesting that online communication platforms reduce language anxiety and increase participation. Learners' reports of improved writing, pronunciation, and general proficiency illustrate Telegram's potential as an effective supplementary tool for language development.

Similarly, the strong readiness to participate and high frequency of online engagement reflect a positive learner attitude toward technology-based learning. The willingness of students to share resources and respond promptly to peers underscores the platform's role in promoting active, student-centered participation. This behavior aligns with principles of social constructivism, which highlight the importance of collaborative knowledge-building in digital learning environments.

Self-directed learning emerged as one of the most significant themes. Learners appreciated the autonomy provided by Telegram, particularly in overcoming limitations of time and physical space. The platform supported independent review, exploration of materials, and ongoing interactions beyond classroom boundaries. This aligns with the literature on mobile-assisted language learning, which emphasizes flexibility and learner autonomy as central benefits.

Despite occasional issues with internet connectivity, learners overwhelmingly expressed positive attitudes toward Telegram. They recognized its value in supporting learning, fostering communication, and creating a sense of community. Their willingness to adopt Telegram for future courses reinforces the platform's effectiveness and usability. Overall, the findings suggest that Telegram, as a widely accessible and familiar digital tool, holds strong potential for enhancing language learning in higher education. Its contribution to communication, collaboration, and autonomous learning highlights its continued relevance in technology-enhanced language environments.

6. Conclusion

This study aimed to examine the effectiveness of Telegram as a digital learning tool (DLT) for supporting ESL learning, focusing specifically on learners' familiarity, engagement, readiness to participate, and self-directed

learning. The findings indicate that Telegram successfully supports these objectives by offering flexibility, continuous access to learning materials, and active participation through interactive features such as chat functions, media sharing, and online discussion forums. These functions fostered improved confidence, increased communication in English, and encouraged autonomous learning beyond classroom constraints.

In addressing the research objectives, the results confirmed that Telegram can serve as a complementary platform to conventional teaching, particularly in promoting collaborative learning, language acquisition, and task completion across time and space barriers. Learners demonstrated high readiness to engage with course-related content and willingly used Telegram to exchange information, discuss classroom topics, and develop linguistic skills, especially in writing, vocabulary, and pronunciation. Despite the positive outcomes, several challenges emerged, including distractions from non-academic content, inconsistent internet connectivity, and limited instructor feedback. These issues highlight the need for structured pedagogical strategies and clear activity guidelines to optimize Telegram's instructional value. Educators should incorporate Telegram with intentional task design, explicit learning objectives, and monitoring mechanisms to ensure productive interaction.

Telegram can function as a supplementary LMS that enhances ESL instruction through real-time communication, peer collaboration, and accessibility to learning materials. Language educators should consider adopting blended learning models that integrate Telegram into traditional classroom practices. Training for both teachers and students is essential to ensure purposeful use of Telegram and to minimize distractions. Higher learning institutions may explore Telegram-based micro-learning modules, language challenges, and bot-integrated assessments to maximize learning outcomes for the ESL/EFL students. Telegram demonstrates strong potential as an auxiliary platform for language learning acquisition particularly when aligned with student-centered pedagogy. While challenges exist, appropriate instructional design and institutional support can harness Telegram's strengths to foster inclusive, autonomous, and engaging digital language learning environments.

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Conflict of Interest

There is no potential conflict of interest with respect to the research, authorship, or publication of this article.

Author Contribution

The authors confirm contribution to the paper as follows: **study conception and design:** *Mohammad Talha Mohamed Idris, Norliza Ghazali, Ruhil Amal Azmuddin;* **data collection** *Mohammad Talha Mohamed Idris;* **analysis and interpretation of results:** *Mohammad Talha Mohamed Idris, Norliza Ghazali, Ruhil Amal Azmuddin;* **draft manuscript preparation:** *Mohammad Talha Mohamed Idris, Norliza Ghazali, Ruhil Amal Azmuddin. All authors reviewed the results and approved the final version of the manuscript.*

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