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Leveraging ICT tools to foster digital communication and digital society responsibility in ELT classrooms

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Abstract

In an era defined by rapid technological advancements, fostering digital communication and responsibility is crucial for preparing learners to thrive in a digitally interconnected society. In English Language Teaching (ELT), the integration of Information and Communication Technology (ICT) tools and Internet of Things (IoT) technologies offers transformative opportunities to enhance learning outcomes while promoting ethical digital practices and global communication skills. A qualitative case study was conducted with 43 English prospective teachers who enrolled ICT in ELT subject. Data from semi-structured interviews, questionnaires, and document analysis revealed that ICT tools significantly improve student engagement and communication. Platforms like Google Classroom and Schoology were noted for facilitating collaborative discussions, while virtual tools such as Zoom enhanced real-time interaction and intercultural exchanges. Collaborative tools like Padlet and IoT-enabled devices supported interactive, context-rich learning environments. Findings showed that 85% of participants observed improved digital literacy and communication skills among students, particularly in group projects and global virtual exchanges. However, challenges such as technical limitations and teacher readiness were highlighted. AI tools like ChatGPT fostered learner autonomy, though some educators expressed concerns about ethical use. This study emphasizes the transformative role of ICT and IoT in fostering global digital communication and responsibility in ELT, underscoring the need for teacher training and resource optimization.

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Keywords

Digital communication, Digital society responsibility, ICT in ELT, IoT in education

Introduction

The rapid evolution of Information and Communication Technology (ICT) has redefined the landscape of education, particularly in language learning. English, being the global lingua franca, necessitates a teaching approach that prepares learners for digital communication in professional and personal contexts. However, this shift also demands that students develop digital society responsibility—a conscious awareness of ethical, legal, and respectful online behaviors. Despite the integration of ICT in many English Language Teaching (ELT) classrooms, the focus on fostering these dual competencies remains limited. This study aims to address this gap by investigating how ICT tools can be effectively utilized to enhance digital communication and societal responsibility in ELT classrooms. The integration of ICT tools in ELT has shown significant potential to address these needs. However, challenges remain in equipping prospective English teachers with both the practical skills and ethical awareness required in digital communication skills and promoting digital society responsibility among English teacher candidates.

In today's interconnected world, digital communication has become an essential skill for students, especially those preparing for global professions such as English teaching. Moreover, understanding digital society responsibilities—such as digital citizenship, ethics, and online safety—has become a crucial competency for navigating virtual environments. Digital communication involves effectively conveying ideas through online platforms. [1] highlights the value of simulating professional communication scenarios, such as drafting emails or delivering virtual presentations, to better prepare students for participation in a digital society.

Digital society responsibility encompasses ethical online behavior, critical digital literacy, and adherence to digital citizenship principles. According to [2] integrating digital ethics into education plays a significant role in addressing challenges like cyberbullying, plagiarism, and misinformation. It demonstrates that students exposed to lessons on digital ethics exhibit enhanced online behavior and critical thinking skills. This study aims to: (1) Investigate how prospective English teachers utilize ICT tools to develop digital communication skills in their teaching practices; (2) Examine strategies employed by these prospective teachers to foster digital society responsibility among their students; (3) Identify challenges and opportunities associated with integrating ICT tools into English language teaching (ELT) classrooms.

ICT tools such as Learning Management Systems (LMS), virtual meeting platforms, collaborative apps (e.g., Padlet, Miro), and AI-based language platforms (e.g., Grammarly, Duolingo) have revolutionized the learning process by enabling interactive and student-centered learning experiences. Research shows that integrating these tools improves learner engagement, linguistic accuracy, and communication confidence.

The integration of ICT tools in ELT classrooms has been a significant area of study over the past two decades. Researchers argue that ICT fosters interactive, student-centered learning environments that improve learners' linguistic skills, motivation, and engagement. For instance, laid the foundation by emphasizing that technology could enhance communicative competence by creating authentic and contextualized learning scenarios. Recent studies by have built upon this notion, focusing on specific ICT tools such as video conferencing platforms (e.g., Zoom and MS Teams) and collaborative writing tools (e.g., Google Docs). These studies highlight how ICT tools help learners improve their writing, speaking, and critical thinking skills.

Another strand of research investigates the role of gamified ICT platforms such as Kahoot and Quizlet in promoting vocabulary acquisition and learner engagement. found that gamified tools increase vocabulary retention among ELT learners by 30% compared to traditional methods, demonstrating the potential of interactive digital platforms to support long-term learning.

However, scholars like [3] caution against the overuse of ICT without proper pedagogical alignment. ICT integration in ELT should be guided by clear learning objectives and aligned with learners' digital literacy levels. Without this alignment, ICT could lead to distractions or superficial learning experiences.

In ELT contexts, digital communication encompasses the ability to communicate effectively via emails, chats, video conferences, and collaborative platforms. According to [4], ELT learners who are proficient in digital communication perform better in international job markets and academic collaborations. In the digital era, English learners need not only linguistic competence but also digital communication skills to thrive in academic and professional contexts. Digital communication in ELT involves the ability to use online platforms effectively for collaboration, presentation, and knowledge exchange. [5] explored how ICT-based task-based learning impacts learners' ability to engage in virtual teamwork and professional email writing. Their study found that integrating ICT tools such as Google Workspace and Slack enhances students' ability to write formal emails, participate in video conferencing, and collaborate on shared documents.

However, challenges remain in teaching digital communication skills in ELT classrooms. [6] argue that many language teachers lack the training to teach students how to use ICT tools effectively for professional communication, leaving a gap in their preparedness for real-world tasks.

As technology permeates every aspect of life, there is a growing emphasis on teaching students to use digital platforms responsibly. Topics such as online etiquette, intellectual property rights, cyberbullying prevention, and data privacy are essential components of digital literacy. Integrating these elements in ELT classrooms ensures students act as responsible digital citizens. As technology becomes integral to education, fostering digital society responsibility has emerged as an essential aspect of language education. Digital society responsibility refers to learners' ability to engage ethically, legally, and respectfully in online environments. Digital citizenship as the responsible use of technology, encompassing online etiquette, respect for intellectual property, and awareness of data privacy.

The importance of embedding digital society responsibility in ELT classrooms is supported by several studies. For example, [7] investigated the impact of teaching digital ethics alongside language skills. Their findings revealed that learners who participated in lessons on online etiquette and copyright issues demonstrated greater awareness of ethical behaviors, such as proper citation and respectful interaction in online forums.

Existing literature establishes that ICT tools are effective in enhancing ELT learners' linguistic skills, digital communication capabilities, and understanding of digital society responsibility. However, there is limited research that holistically examines how these competencies can be fostered simultaneously within ELT classrooms. Furthermore, while studies like those [8][9] have explored the benefits of specific ICT tools, more research is needed on their combined impact on both communication skills and digital ethics. The lack of teacher training and resources to integrate digital ethics into ELT curricula, further underscores the need for practical strategies to address these challenges.

This study aims to bridge these gaps by investigating how ICT tools can simultaneously foster digital communication skills and digital society responsibility among ELT learners, providing actionable insights for prospective teachers, educators and policymakers.

Method

This study employed a descriptive qualitative approach to investigate how ICT tools foster digital communication and digital society responsibility among prospective English teachers. The participants consisted of 43 prospective English teachers from a private university, selected through purposive sampling.

Data were collected through multiple qualitative instruments to capture the complexity of the phenomenon. Semi-structured Interviews has been conducted with 15 participants to understand their experiences with ICT tools in teaching and their perceptions of fostering digital communication and digital responsibility. Participants were observed during their teaching practice sessions to examine how ICT tools were integrated into lesson delivery and how digital communication and responsibility were addressed. Therefore, lesson plans, teaching materials, and reflective journals prepared by participants were analyzed to gain insights into the strategies used to incorporate ICT tools in their teaching.

Result and Discussion

Participants reported that ICT tools such as Google Workspace, Zoom, and collaborative apps (e.g., Padlet) facilitated dynamic and interactive communication practices in their teaching experiences. For example, during classroom observations, several participants used Google Docs for real-time collaborative writing tasks, which not only improved

students' writing skills but also encouraged them to engage in discussions about appropriate language use and tone in professional contexts.

Participants in the interviews mentioned that they incorporated simulated real-world communication tasks such as email writing, virtual meeting role plays, and online discussion forums into their lessons. This approach enabled learners to develop essential digital communication competencies such as clarity, formality, and intercultural awareness. However, challenges were noted as well. Some participants highlighted that their students struggled with technological barriers, such as unfamiliarity with certain tools or limited internet access, which hindered the effective use of ICT for communication. During classroom observations, it was noted that students demonstrated a greater ability to structure their ideas clearly in online discussions, suggesting that ICT integration improved both linguistic and digital communication skills. However, some challenges arose, such as students being unfamiliar with specific platforms, which required additional guidance from teachers. The most favourite ICT tools would be presented in the following Table 1.

Table 1. ICT Tools Used and Their Applications		
ICT Tool	Application in ELT	Skill Focus
Google Docs	Collaborative writing, editing, and feedback sessions	Writing, teamwork
Zoom/MS Teams	Online presentations, mock interviews, and discussions	Speaking, intercultural skills
Padlet	Posting reflections and peer feedback activities	Writing, critical thinking
Quizlet	Vocabulary building and gamified discussions	Vocabulary retention
Grammarly	Teaching grammar and plagiarism awareness	Writing, academic integrity

Survey results revealed a significant improvement in students' awareness of ethical online behaviors. For example, 85% of the experimental group could identify and correct improper online behaviors (e.g., plagiarism, inappropriate comments).

The data revealed that promoting digital society responsibility was often addressed through a combination of explicit lessons and implicit modeling. For example, one participant organized a classroom activity where students critically evaluated examples of online posts, identifying inappropriate behaviors and proposing corrective measures. Another participant conducted a role-play scenario on handling cyberbullying in virtual learning environments, helping learners practice empathetic and constructive online interactions.

Classroom observations confirmed that many participants also modeled responsible online behaviors, such as citing their sources in teaching materials and addressing inappropriate behaviors constructively when they arose in online discussions. Participants consistently highlighted the importance of teaching digital ethics alongside language skills. Despite the positive outcomes, participants noted several challenges in integrating ICT tools into their teaching:

- 1. Limited Access to Resources: Participants teaching in underprivileged environments highlighted difficulties in accessing reliable internet and ICT devices, which limited the frequency and quality of ICT-based activities.
- 2. Lack of Training: Several participants expressed uncertainty about how to effectively teach digital society responsibility, as they had not received formal training on the topic.
- 3. Student Readiness: A few participants observed that their students were not always prepared to engage responsibly in online activities, requiring additional scaffolding and guidance.

On the other hand, participants identified opportunities for leveraging ICT to enhance both digital communication and responsibility, such as:

- 1. Using gamified tools like Quizlet to make discussions about digital ethics more engaging.
- 2. Encouraging peer-to-peer learning by having students collaboratively solve ethical dilemmas in online communication.
- 3. Creating digital portfolios to showcase responsible online interactions and professional communication skills.

Interviews revealed that students valued the hands-on experience with real-world digital platforms. They felt more prepared to engage responsibly in online interactions and appreciated the inclusion of discussions on digital ethics. When asked to reflect on their experiences, participants overwhelmingly agreed that integrating ICT tools enriched their teaching practice and helped them prepare their learners for real-world communication. One participant remarked:

"ICT tools allowed me to bring authentic tasks into the classroom. My students now know how to write professional emails, participate in online discussions, and also understand why respecting digital ethics is important."

Another participant reflected on the transformative potential of teaching digital responsibility:

"It's not just about teaching language skills anymore. We are preparing them to be responsible digital citizens who can navigate the complexities of the online world."

The participants identified both barriers and opportunities in using ICT tools to address digital communication and digital society responsibility.

The findings align with [1] emphasis on the importance of simulating professional scenarios to build digital communication competence. While prospective teachers showed enthusiasm for ICT integration, challenges such as limited technological infrastructure and inadequate training hindered their ability to fully utilize these tools.

To address this, professional development programs focusing on ICT tools and their pedagogical applications should be prioritized. It also reflect [10] recommendation to incorporate digital ethics into educational settings. While most participants acknowledged the importance of teaching digital responsibility, only a few integrated these concepts into their daily teaching routines. The study suggests that a lack of resources, time constraints, and limited awareness of available teaching frameworks are primary barriers. Embedding digital ethics into the curriculum as a cross-cutting theme may encourage more consistent practice. Lastly, [11] the findings support claim that addressing digital literacy improves student behavior and critical thinking. However, this study emphasizes the need for systemic support to ensure equitable access to technology and teacher training. Future initiatives should focus on building robust digital infrastructure, providing ICT-oriented professional development, and fostering a mindset shift toward embracing technology in education.

Conclusion

The study highlighted that integrating ICT tools in English Language Teaching (ELT) significantly enhances students' digital communication skills and awareness of digital society responsibilities. Using collaborative tools like Google Docs, Zoom, and Padlet, students improved their ability to communicate effectively and ethically in digital spaces. Explicit instruction on digital citizenship and implicit modeling by teachers further instilled a sense of responsibility regarding online behavior. Despite facing challenges like limited resources and resistance from students, the opportunities presented by ICT integration, such as fostering intercultural communication and critical thinking, underscore its transformative potential in ELT classrooms. Further studies should explore long-term impacts of ICT-based teaching on students' digital literacy and assess its adaptability across different educational contexts. Research could also investigate the role of gamified ICT tools in fostering digital responsibility.

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