



STUDENTS' PERCEPTIONS OF ICT BASED ACTIVITIES IN EFL COURSES

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ABSTRACT

This research investigates students' perceptions of Information and Communication Technology (ICT) integration in English as a Foreign Language (EFL) courses, using the SAMR model (Substitution, Augmentation, Modification, and Redefinition) as an evaluative framework to assess the depth and quality of digital technology use in learning. Using a descriptive quantitative approach, data were collected through questionnaires and interviews from 73 students at the Language Development Center (LDC) of Muhammadiyah University of Purwokerto. The findings reveal a very high level of technological proficiency, with 97.3% of students regularly using smartphones, social media, Zoom, and Microsoft Word, while 95.9% demonstrated competency in operating laptops and email services. ICT integration among teachers was predominantly observed at the Substitution and Augmentation stages of the SAMR model, with more experienced teachers reaching the Modification stage through the use of interactive platforms such as Kahoot, Quizizz, and Padlet. Students reported predominantly positive perceptions of ICT, noting improvements in learning effectiveness, flexibility, and academic autonomy. However, challenges related to self-regulation, particularly in time management and concentration, were also identified. These findings underscore the importance of aligning ICT choices with student profiles and capabilities, and suggest that institutional and pedagogical support is essential for advancing toward more transformative levels of digital integration in higher education EFL contexts.

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1. INTRODUCTION

Information and Communication Technology (ICT) has become an integral part of modern education, fundamentally reshaping teaching and learning practices across diverse contexts. In the context of English as a Foreign Language (EFL) learning, the rapid expansion of digital tools from video-conferencing platforms and learning management systems to gamified applications has created new possibilities for language practice, collaboration, and independent learning. However, the effectiveness of ICT integration depends largely on how technology is selected and implemented in specific institutional contexts, as students' use of digital technologies is shaped not only by individual preferences but also by the institutional contexts in which they are situated (Henderson et al., 2017).

Despite growing access to digital tools, research consistently shows a gap between technology availability and its meaningful implementation in EFL classrooms. Although many Indonesian EFL teachers acknowledge the importance of digital learning, their actual practices often reflect hesitancy and lack of preparation, influenced by inadequate training, limited resources, and institutional constraints (Nugroho & Mutiaraningrum, 2020). This suggests that positive attitudes toward ICT do not automatically lead to transformative classroom practices, and that teachers' pedagogical readiness remains a critical factor in determining the quality of technology integration.

Several scholars have examined students' perceptions of ICT use in EFL settings and found that while students generally possess adequate technical skills, challenges related to self-regulation, motivation, and learning autonomy persist (Alkaromah et al., 2020; Amrullah et al., 2023; Buabeng-Andoh & Yidana, 2015; Cakrawati, 2017; Uspabayeva et al., 2022). In the Indonesian higher education context specifically, students' motivation in technology-enhanced learning is negatively affected by factors such as lecturers' ineffective teaching strategies, poor time management, unsupportive learning environments, and unstable internet connectivity (Iftanti et al., 2023), indicating that ICT integration must be carefully tailored to the learner's context and institutional conditions to be truly effective.

This gap becomes particularly significant when examined through the lens of the SAMR model (Substitution, Augmentation, Modification, and Redefinition), a widely used framework for evaluating the depth and quality of technology integration in education. A scoping review of 230 research publications found that lower levels of the SAMR model particularly substitution and augmentation are applied far more frequently than the transformative levels of modification and redefinition (Blundell et al., 2022). This pattern has also been observed specifically in the Indonesian EFL context, where a teacher was found to integrate ICT predominantly at the substitution and augmentation stages and hardly reached the modification and redefinition stages (Budiman et al., 2018). Research applying the SAMR model within EFL language development centers in Indonesian universities, however, remains limited, leaving a gap in understanding how deeply ICT is being integrated in such institutional contexts.

Therefore, this study was conducted at the Language Development Center (LDC) of Muhammadiyah University of Purwokerto to address this gap. By investigating students' perceptions and patterns of ICT use through the lens of the SAMR model, this study

contributes to the growing body of literature on technology-enhanced EFL learning while offering contextually relevant recommendations for institutional practice. This study aims to answer three research questions: (1) What ICT applications are used in the English language classroom? (2) How are ICT applications used in the English language classroom? (3) What are students' perceptions of and the factors influencing the use of ICT applications in the English language classroom?

2. RESEARCH METHODS

According to Hancock et al. (2001) descriptive quantitative approach focuses on explaining social phenomena and depicting them as they naturally occur. Additionally, descriptive studies aim to determine the current state of phenomena and identify the situation as it exists during the research. This study employs a descriptive quantitative research design to investigate students' perceptions of using Information and Communication Technology (ICT) in English as a Foreign Language (EFL) learning. Conducted in August 2024 in Purwokerto, the research context is shaped by the modern technological environment of the region and the influence of Muhammadiyah, an organization that supports educational transformation through digital platforms and distance learning initiatives like Muhammadiyah Cyber University (SiberMu). The research population consists of students from Universitas Muhammadiyah Purwokerto (UMP), selected via random sampling due to their diverse and flexible use of digital media. Data were collected using a combination of questionnaires (distributed via Google Forms and in print) and interviews (structured, semi-structured, and unstructured) to ensure a comprehensive understanding of student experiences. According to Creswell (2012) with a one-on-one interview, the data gathered became more accurate because the participants can communicate naturally, comfortably, and clearly so that the researcher can ask if there is any misunderstanding on the questions asked. With this interview, the researcher made the participant talk more comfortable and open. This interview also be recorded and recorded with the participant's approval to minimize the occurrence of misinterpretation of information by the researcher. These instruments underwent validation by an expert lecturer from Universitas Negeri Yogyakarta and were further analyzed for validity and reliability using SPSS. The data analysis process involved transcribing recorded interviews, performing member checking with participants via email to ensure accuracy, and utilizing SPSS to perform statistical and descriptive analyses specifically calculating average scores and response percentages to evaluate ICT usage patterns according to the SAMR model.

3. RESULTS AND DISCUSSION

ICT Applications Used in the English Language Classroom

The findings reveal a very high level of technological proficiency among the 73 students at the Language Development Center (LDC) of Muhammadiyah University of Purwokerto. More than 90% of students frequently use core digital tools, with smartphones, social media, Zoom, and Microsoft Word each used by 97.3% of respondents. Foundational digital competencies were nearly universal, including operating laptops (95.9%), using email

services (95.9%), and installing software independently (93.2%). Widely adopted educational platforms such as Google Classroom and Canva were used by 80.8% of students, reflecting active engagement in blended learning and digital content creation. In contrast, older or less institutionally supported platforms such as Edmodo (24.7%) and Schoology (21.9%) showed the lowest adoption rates. Notably, several students voluntarily reported using AI-based tools such as ChatGPT beyond the scope of the questionnaire, indicating self-directed adoption of emerging technologies in their academic routines.

These findings are consistent with broader trends in EFL higher education, where students consistently demonstrate positive attitudes toward ICT as a valuable tool for enhancing language learning, improving motivation, and supporting engagement in classroom activities (Fadillah et al., 2024). The low adoption rates of legacy platforms such as Edmodo and Schoology reflect a pattern identified across multiple EFL contexts, where students tend to favor tools that are practical, convenient, and aligned with their everyday digital habits (Sulaeman et al., 2024). However, as also noted by Fadillah et al. (2024), the positive impact of ICT on learning outcomes is contingent upon adequate teacher supervision and instructional guidance to ensure responsible and purposeful technology use. The voluntary adoption of AI tools such as ChatGPT among LDC students represents a notable finding that extends current literature, as AI-powered tools have been shown to support personalized learning, enhance student motivation and engagement, and foster self-directed learning in educational contexts (Adiguzel et al., 2023). This suggests that institutional ICT frameworks in Indonesian higher education need to proactively incorporate emerging AI-based technologies to remain aligned with students' rapidly evolving digital practices a dimension not yet systematically addressed in the existing EFL literature.

ICT Applications Used in the English Language Classroom (SAMR Analysis)

Analysis of teacher interviews reveals that ICT integration at LDC generally falls within the Substitution, Augmentation, and Modification stages of the SAMR model, with variation largely determined by teaching experience. All five teachers use laptops, projectors, and speakers to deliver materials and audio content, reflecting Substitution as digital tools replace traditional media, and Augmentation as audio-visual features enhance presentation activities. More experienced teachers demonstrate deeper integration at the Modification level by employing interactive and game-based platforms such as Kahoot, Quizizz, Blooket, Padlet, Google Docs, and WhatsApp voice notes to facilitate collaborative writing, student-centered practice, and dynamic assessment. Evidence of Redefinition, however, remains limited, with only one instance identified in which audio technology enabled a learning experience considered entirely irreplaceable by traditional means.

These findings are consistent with Budiman et al. (2018), who found that an Indonesian EFL teacher predominantly operated at the Substitution and Augmentation stages and rarely achieved Modification or Redefinition, largely due to the perceived complexity and time demands of higher-level ICT integration. At a broader level, Blundell et al. (2022) demonstrated through a scoping review of 230 publications that lower SAMR levels are applied far more frequently across educational contexts globally, confirming that

surface-level technology adoption remains the norm rather than the exception. The present study, however, extends these findings by showing that in contexts where teacher experience and institutional support are sufficiently developed, progression toward Modification is attainable within the same institutional setting. This finding underscores the critical role of teacher professional development in facilitating deeper ICT integration, a point also emphasized by Nugroho & Mutiaraningrum (2020), who identified inadequate training and limited institutional support as central barriers to transformative technology use among Indonesian EFL teachers. The contribution of this study lies in demonstrating that SAMR progression is mediated by individual teacher experience within a single institution, a nuance that has not been well-documented in the Indonesian EFL literature and that warrants further investigation into how experience-based professional development can be deliberately designed to support higher-level SAMR integration.

Students' Perceptions and Factors Influencing ICT Use

The questionnaire results indicate predominantly positive perceptions of ICT among LDC students. Most students report high self-efficacy in using digital tools, consider ICT beneficial and appropriate for EFL learning, and recognize its role in improving learning effectiveness, promoting active engagement, and supporting academic autonomy. ICT is particularly valued for providing flexibility in time and place, accommodating individual learning styles, and enabling students to access, evaluate, and organize information independently. Strong environmental support including encouragement from teachers, family, peers, and the university further reinforces students' confidence and willingness to engage with technology in learning. Nevertheless, a notable minority of students indicate that technology use does not automatically enhance motivation, enjoyment, time management, or concentration, suggesting that positive perceptions alone are insufficient to guarantee productive self-regulated learning behaviors.

These findings align with evidence from multiple EFL contexts showing that students generally hold positive attitudes toward ICT and perceive it as a valuable tool for improving language learning motivation, engagement, and proficiency (Fadillah et al., 2024). The challenges related to self-regulation and time management identified in this study reflect patterns documented in the Indonesian EFL context, where students' motivation in technology-enhanced learning is negatively affected by poor time management, unsupportive learning environments, and insufficient teaching strategies (Iftanti et al., 2023). Notably, the strong environmental support reported by LDC students particularly teacher encouragement and peer influence represents a contextual advantage not consistently reported in comparable studies and may partially explain the higher-than-average levels of ICT confidence and readiness observed in this sample. As highlighted by Fadillah et al. (2024), however, the effectiveness of ICT in promoting language learning outcomes ultimately depends on the presence of adequate pedagogical guidance and teacher supervision to ensure that students engage with technology in purposeful and responsible ways. The contribution of this study lies in demonstrating that environmental support factors play a more prominent role in shaping positive ICT perceptions in

institutional EFL contexts than previously emphasized, and that future pedagogical efforts should explicitly integrate instructional strategies addressing self-organization, sustained focus, and motivation within digital learning environments to maximize the benefits of students' strong technological readiness.

4. CONCLUSION

This study investigated students' perceptions of ICT integration in EFL learning at the Language Development Center (LDC) of Muhammadiyah University of Purwokerto. The findings demonstrate that students possess a very high level of technological proficiency, with over 90% regularly using core digital tools such as smartphones, social media, Zoom, and Microsoft Word. ICT integration among teachers was found to operate predominantly at the Substitution and Augmentation stages of the SAMR model, with more experienced teachers reaching the Modification level through the use of interactive platforms such as Kahoot, Quizizz, and Padlet. Students reported predominantly positive perceptions of ICT, recognizing its role in improving learning effectiveness, flexibility, and academic autonomy, though challenges related to self-regulation and time management were also identified.

These findings carry important implications at both the pedagogical and institutional levels. For teachers, aligning ICT choices with students' demonstrated abilities, preferences, and learning styles is essential for fostering higher levels of engagement and motivation. For the institution, student perception data serves as a valuable feedback mechanism to guide the continuous refinement of learning platforms, materials, and media. At a broader level, this study contributes empirical evidence to the field of educational technology, particularly in the context of Indonesian EFL higher education, by demonstrating that meaningful ICT integration requires moving beyond mere technological availability toward strategic, learner-focused deployment guided by the SAMR framework. Future research is encouraged to explore how institutional support and teacher professional development can facilitate progression toward the higher levels of the SAMR model, particularly Modification and Redefinition, to maximize the transformative potential of ICT in EFL learning.

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