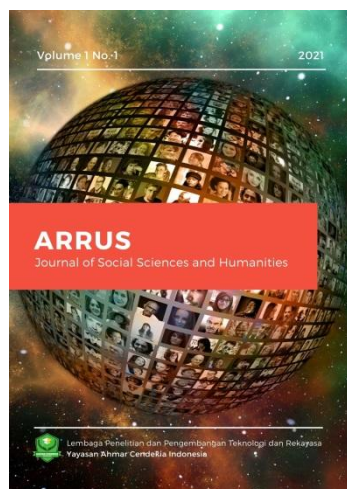




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RESEARCH ARTICLE

English Teachers' Perception of ICT Use in EFL Teaching and Learning

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Abstract: The integration of Information and Communication Technology (ICT) into English as a Foreign Language (EFL) classrooms is globally recognized as essential for enhancing teaching and learning processes. However, despite this acknowledged need, the specific application and perception of ICT use within Indonesian primary schools remain an under-researched area, representing a significant gap in the existing literature. This qualitative case study aimed to investigate Indonesian EFL teachers' perceptions of ICT utilization in their classrooms and to identify the critical factors influencing their decisions to adopt such technologies. Data were gathered through semi-structured interviews with two English teachers in a primary school located in Makassar, Indonesia. The principal findings indicate that the participating teachers held overwhelmingly positive attitudes toward ICT integration in their teaching practices. This favorable disposition was significantly shaped by several factors, including the perceived ease of use and the perceived usefulness of ICT tools, the teachers' underlying pedagogical beliefs, supportive school policies and curriculum mandates, the ready accessibility of technological resources, and the provision of professional development opportunities. Concurrently, the study identified notable challenges, such as student behavior related to technology misuse and the teachers' self-reported lack of sufficient ICT skills and confidence. A compelling observation from the findings is the coexistence of extensive ICT use and positive perceptions with a perceived lack of personal competence among teachers. This suggests that powerful external factors, such as institutional support and the clear utility of the technology, can be more influential in driving adoption than individual skill mastery or confidence in the initial stages. The implication is that confidence might develop as a consequence of sustained use, rather than being a prerequisite for it. This study offers valuable insights for practitioners and educational stakeholders committed to fostering effective ICT integration within EFL contexts, particularly in similar developing educational environments.

Keywords: Teacher Perception, ICT Use, Indonesian Primary School, TEFL.

1. Introduction

The contemporary educational landscape is increasingly shaped by the pervasive influence of Information and Communication Technology (ICT), which has garnered escalating attention across various disciplines, particularly in its capacity to revolutionize foreign language learning. The transformative potential of ICT to enhance both teaching and learning



processes is widely acknowledged, making its effective integration a critical area of focus for educators globally.

Within the specific context of Indonesia, the imperative for ICT integration is underscored by national educational mandates. Regulations from the Ministry of National Education (MONE, 2007) and the Curriculum 2013 explicitly require subject teachers to utilize ICT for teaching purposes, communication, and professional self-improvement, thereby positioning ICT competence as a core component of professional and pedagogical proficiency (MONE, 2007). Despite these clear governmental directives, the full implementation of ICT in Indonesian classrooms faces considerable hurdles. A notable disconnect exists between the aspirational policy and the practical realities on the ground, as evidenced by the limited number of schools possessing adequate ICT infrastructure and the reported variability in teachers' ICT skills (Safitry et al., 2015). This discrepancy between policy and practice highlights a critical research impetus: understanding the on-the-ground realities that either facilitate or impede the implementation of national educational mandates. The present study, therefore, serves to illuminate the intricate dynamics of ICT adoption, offering direct implications for effective educational reform beyond mere academic interest.

Given this context, the role of teachers' perceptions and the factors that influence their decisions to integrate technology become paramount for successful ICT adoption. Every teacher brings unique opinions and experiences with technology, making their individual and collective perceptions central to understanding implementation success or failure. This study was thus guided by two primary research questions:

1. What are Indonesian EFL teachers' perceptions of ICT use in their classrooms?
2. What are the decisive factors influencing Indonesian EFL teachers' decision to use ICT?

By addressing these questions, this research aims to provide valuable information for English language teachers, particularly those intending to integrate ICT into their EFL classrooms. Furthermore, its findings are designed to offer insights for educational policymakers and other stakeholders interested in effectively implementing ICT in schools within the Indonesian EFL context.

2. Literature Review

This section synthesizes existing scholarly work on Information and Communication Technology (ICT) use in education, particularly within English as a Foreign Language (EFL) contexts. It establishes the theoretical foundation for the study and contextualizes the research within current knowledge, highlighting what is known and identifying the specific gap this investigation addresses.

2.1. *English as a Foreign Language in Indonesia and ICT Use*

The status of English as a foreign language in Indonesia presents unique challenges, primarily the limited exposure Indonesian students have to the language. This scarcity of authentic interaction hinders their ability to practice and improve their English proficiency. However, advancements in technology offer a potent solution. Digital tools such as smartphones, tablets, and laptops provide students with unprecedented access to English-language music, movies, newspapers, and a wealth of authentic materials available online. Mastering English is increasingly vital for Indonesian students, given the country's tourism industry, the prevalence of academic literature in English, and the requirements for international university admissions.

Teachers leverage ICT in diverse ways within the classroom. Research by Tondeur, Van Braak, and Valcke (2007) identifies three dimensions of computer use in primary education: as a tool for basic computer skills, as an information resource, and as a learning instrument (Tondeur et al., 2007). Studies also indicate that teachers frequently use the internet to search for information and teaching resources (Schuck, 2003; Karsenti & Collin, 2012). For instance, Li and Walsh (2011) observed Chinese secondary EFL teachers predominantly employing

PowerPoint presentations to display visual aids, grammar rules, or sentence structures (Li & Walsh, 2011).

2.2. Benefits of ICT Use in EFL

A significant body of literature consistently reports that teachers hold positive attitudes toward ICT integration in their classrooms (Aydin, 2013; Cahyani & Cahyono, 2012; Çelik & Aytin, 2014; Li & Walsh, 2011; Safitry et al., 2015; Silviyanti & Yusuf, 2015). They perceive ICT as highly beneficial for cultivating enjoyable, interesting, and effective learning environments (Silviyanti & Yusuf, 2015). ICT has been shown to enhance student motivation (Karsenti and Collin, 2012; Al-Awidi & Ismail, 2014), foster active and autonomous learning (Smeets, 2005), and provide diverse language inputs that expand students' learning experiences in authentic contexts (Park & Son, 2009). These benefits collectively underscore the potential of ICT to transform pedagogical practices in foreign language education.

2.3. Theoretical Framework: Technology Acceptance Model (TAM)

This study employs the Technology Acceptance Model (TAM), developed by Davis, Bagozzi, and Warshaw (1989), as its primary theoretical lens (Davis et al., 1989). TAM is widely recognized and extensively used in research on information technology adoption (Liu et al., 2017). The model posits that users' intentions to use technology are primarily influenced by two core constructs:

- (1). Perceived Usefulness (U): This refers to a prospective user's belief that employing a particular application will enhance their performance in their work or tasks (Davis et al., 1989).
- (2). Perceived Ease of Use (EOU): This is defined as a prospective user's belief that using the target system will be free from effort (Davis et al., 1989).

The central premise of TAM is that when users perceive technology as both useful and easy to use, it fosters a positive attitude toward that technology, which in turn leads to a higher behavioral intention to use it (Davis et al., 1989). While TAM provides a strong foundation for understanding the initial decision to accept and use technology, the comprehensive literature review, and subsequently the study's findings, delve into additional factors crucial for sustained, effective integration. This suggests that TAM's utility extends beyond mere acceptance to a more holistic understanding of continuous and deep pedagogical integration of ICT, where external support systems play a vital role in overcoming evolving barriers. Perceived usefulness and ease of use are key drivers for initial acceptance, but for long-term, effective integration, these must be continuously reinforced and supported by external factors that address evolving challenges and build ongoing competence and confidence.

2.4. Factors Influencing ICT Adoption

The adoption of ICT in classrooms is influenced by a complex interplay of factors, often categorized as internal (second-order) and external (first-order) (Ertmer, 1999). While internal factors, such as teachers' beliefs, attitudes, and confidence, are often considered to exert a greater influence (Ertmer, 1999), there is a dynamic relationship where strategic external interventions can significantly shape these internal dispositions.

Internal Factors:

Teachers' beliefs about the advantages of technology and its capacity to meet student needs are critical in their decision to use ICT (Lam, 2000; Askar & Umay, 2001). Teachers who embrace a constructivist and student-oriented pedagogical approach tend to integrate ICT more readily into their classrooms (Becker & Ravitz, 2001; Eteokleous, 2008). Similarly, positive attitudes and a sense of confidence regarding computer use are strong predictors of future technology adoption (Zhao et al., 2000; Teo et al., 2008; Myers & Halpin, 2002; Atkins & Vasu, 2000).

External Factors:



- (1). Professional Development: The mere availability of ICT facilities does not guarantee adoption; teachers require specific skills and knowledge to effectively utilize technology (Bingimlas, 2009). Training and professional development initiatives are crucial for motivating teachers to use ICT more efficiently (Bingimlas, 2009; Demetriadis et al., 2003; Galanouli et al., 2004). Effective training should be practical, hands-on, tailored to specific school needs, and integrated with the curriculum, rather than merely focusing on basic computer skills (Eteokleous, 2008; Gilakjani & Leong, 2012; Balanskat et al., 2006; Brush et al., 2003).
- (2). Administrative and Peer Support: Strong support from school administration is paramount for successful computer integration, particularly for teachers who may lack advanced ICT skills (Eteokleous, 2008). Furthermore, assistance and collaborative influence from colleagues with greater ICT proficiency can significantly encourage technology use among peers (Becker & Ravitz, 2001; Oncu et al., 2008).
- (3). School Policy and Curriculum Demand: Explicit mandates from school policies and curriculum requirements can serve as powerful drivers for ICT implementation, provided that adequate training and resources are simultaneously supplied (MONE, 2007).
- (4). Accessibility: Easy access to ICT resources, encompassing hardware, software, and reliable internet connectivity, is a critical component for maximizing ICT use and facilitating teacher self-training and exploration (Bingimlas, 2009). Limited access, conversely, can demotivate teachers from utilizing technology (Mumtaz, 2000; Osborne & Hennessy, 2003; Albirini, 2006; Çelik & Aytin, 2014).
- (5). Educational Software: The availability and quality of educational software, such as the comprehensive suite of Google for Education applications, can profoundly influence teachers' decisions to integrate ICT into their pedagogical practices (Gil-Flores et al., 2017; Mumtaz, 2000).

2.5. Challenges in Using ICT

Despite the recognized benefits and facilitating factors, several barriers can impede the successful integration of ICT. These obstacles are also broadly categorized as first-order (extrinsic) and second-order (intrinsic) (Ertmer, 1999).

- (1). Lack of Facilities: Insufficient computers and inadequate resources consistently emerge as primary hindrances to ICT integration (Çelik & Aytin, 2014; Hedayati & Marandi, 2014; Hu & McGrath, 2012; Pelgrum, 2001; Mumtaz, 2000; Park & Son, 2009).
- (2). Lack of ICT Skills and Training: Many EFL teachers report a deficit in their ICT skills and a lack of formal training, which significantly impacts their confidence and willingness to use technology (Aydin, 2013; Bingimlas, 2009; Hu & McGrath, 2012; Pelgrum, 2001; Raman & Yamat, 2014; Safitry et al., 2015; Silviyanti & Yusuf, 2015).
- (3). Lack of Time: Teachers frequently cite insufficient time for planning and effectively integrating technology into their lesson plans as a notable obstacle (Schoepp, 2005; Li & Walsh, 2011; Bingimlas, 2009).
- (4). Lack of Technical Support: The absence of readily available instructional and technical support can severely impede effective ICT use, especially when teachers encounter technical difficulties (Aydin, 2013; Li & Walsh, 2011; Safitry et al., 2015; Bingimlas, 2009).
- (5). Lack of Confidence: A general lack of confidence in their ICT abilities can deter teachers from adopting and consistently using technology in their classrooms (Lam, 2000; Bingimlas, 2009).

3. Research Method

This investigation adopted a qualitative research paradigm, employing a case study approach to thoroughly explore English teachers' perceptions of ICT use in an Indonesian primary school. This methodological choice aligns with a constructivist viewpoint, which emphasizes

understanding the social world through the nuanced interpretations and real-life experiences of participants (Creswell & Miller, 2000; Morehouse & Maykut, 2002; Bryman, 2016).

3.1. Research Design and Rationale

A case study design was specifically chosen for its inherent ability to provide an in-depth examination of unique and dynamic contexts, thereby preserving the comprehensive peculiarities of real-life events (Yin, 2003; Cohen et al., 2007; Denscombe, 2014). This approach is particularly adept at tackling situations that may not be amenable to purely numerical analysis and offers a detailed explanation of the complexities inherent in real-life scenarios (Cohen et al., 2007; Denscombe, 2014). For this study, the case study design was deemed most suitable for investigating the intricate complexities of ICT-based schools in Indonesia, especially at the primary school level, and for uncovering the subtle relationship between the phenomenon of ICT use and its specific educational context (Grey, 2004).

3.2. Participants and Setting

The study involved two female English teachers, identified by the pseudonyms Elli and Karen, from SD Gammara Makassar (a pseudonym for a private ICT-based primary school in Makassar, Indonesia). The primary criterion for participant eligibility was that teachers must have been actively using ICT in their classrooms for at least one semester.

Elli, aged 27, possessed three years of experience teaching English using ICT and was responsible for teaching classes one to three. Karen, aged 23, had two years of similar teaching experience and also taught classes one to three. Both participants held Bachelor of English Language Teaching qualifications, indicating a foundational background in English pedagogy. The school, SD Gammara Makassar, was selected using a purposive sampling strategy due to its reputation for having sufficient ICT facilities, a characteristic known to the researcher through an existing acquaintance.

To ensure ethical conduct, prior approval was secured from the Monash University Human Research Ethics Committee (Project Number: 13524) on May 8, 2018. All participants provided informed consent after receiving comprehensive explanatory statements outlining the study's nature and their rights. Anonymity and confidentiality were strictly maintained throughout the research process, with pseudonyms used for both the participants and the school.

The demographic and professional profiles of the teacher participants are summarized in Table 1, providing a clear overview of the individuals whose experiences form the core of this investigation.

Table 1. Teacher Participant Identification

Pseudonyms	Sex	Educational Background	Study Programme	Teaching Experience
Elli	Female	Bachelor of English Language Teaching	English Teaching Qualification	Three years
Karen	Female	Bachelor of English Language Teaching	English Teaching Qualification	Two years

3.3. Data Collection

Data were primarily collected through semi-structured interviews, a method chosen for its adaptability in exploring participants' opinions, feelings, and experiences within their specific professional context (Bell, 2014; Denscombe, 2014; Seidman, 2013). This approach allowed the interviewer to delve into ideas, explore responses, and understand the nuances of participants' behavior by considering the underlying context (Bell, 2014; Seidman, 2013).

The interview process involved an initial interview conducted in English on May 16, 2018. However, recognizing that the teachers were struggling to fully articulate their ideas in English, a crucial methodological adjustment was made for the subsequent interview on May

19, 2018, which was conducted in Bahasa Indonesia. This adaptation was not merely a logistical adjustment but a critical methodological decision that significantly enhanced the trustworthiness and depth of the qualitative data. It demonstrated the researcher's commitment to prioritizing authentic participant voices and nuanced expression over rigid adherence to a pre-set interview language. This implicitly suggests that even English teachers in EFL contexts may find it more comfortable to articulate complex professional perceptions in their native language, which has implications for how professional development and support are delivered. A third interview was conducted via email for clarification and to provide participants with an additional opportunity to elaborate on their comments if necessary. All interviews were recorded using a smartphone application, Smart Recorder. The interviews were designed to explore English teachers' perceptions of ICT use and the decisive factors influencing their decisions to integrate ICT in EFL classrooms.

3.4. Data Analysis

Thematic analysis was employed for the systematic analysis of the interview transcripts following their transcription and initial coding (Bryman, 2016). A theme, in this context, is defined as a category identifiable from the data that is directly related to the research focus or questions, built upon initial codes from the transcripts, and contributes to a broader theoretical understanding of the phenomenon (Bryman, 2016). While repetition of ideas is a common criterion for identifying themes, the ultimate selection of a theme was also contingent upon its direct relevance to the overarching research questions (Bryman, 2016).

3.5. Trustworthiness

Several measures were implemented to ensure the quality and validity of the data collected. The researcher adhered to ethical interviewing practices, consciously avoiding leading or ambiguous questions and maintaining an open stance to the participants' perspectives (Bryman, 2016). Complex or double-barrelled questions and the use of unfamiliar terminology were also avoided to ensure clarity and accuracy of responses (Bryman, 2016).

Validity checks were performed using three distinct lenses: the researcher's own interpretation, the participants' verification of their statements, and review by an individual external to the project (Creswell & Miller, 2000). To prevent misinterpretation, inferences from the raw data were carefully avoided (Grey, 2004). Following the interviews, the transcribed data were sent back to the interviewees for review, allowing them to check the accuracy of the raw data and provide any necessary comments (Creswell & Miller, 2000). Furthermore, as the interviews were conducted in Bahasa Indonesia, the transcripts were translated into English, and this translation was independently verified by another person to ensure accuracy and fidelity to the original meaning.

4. Results and Discussions

This research investigated two English teachers' perceptions of ICT use in an EFL context within a primary school in Indonesia, addressing the questions: "What are Indonesian EFL teachers' perceptions of ICT use in their classrooms?" and "What are the decisive factors influencing Indonesian EFL teachers' decision to use ICT?". Thematic analysis was used to analyze the interview transcripts, and the findings are presented based on the themes that emerged.

4.1. Teachers' ICT Preferences and Use in Classrooms

Both Elli and Karen, the participating teachers, extensively used ICT in their EFL classrooms. Elli reported using "Internet, tablet, laptop, LCD projector and several Google apps," while Karen used "tablet, LCD, speaker for audio." The most commonly used applications were from Google, including Google Classroom, Google Form, and Google Translate. They also utilized their own applications, such as iGracias, for managing student data. This extensive use of hardware and software by the teachers contrasts with findings by Cuban, Kirkpatrick, and Peck (2001), who suggested that the mere availability of equipment and access to ICT

rarely leads to its widespread use by teachers and students. A possible explanation for this difference is the rapid advancement of technology, including faster internet connections, which may motivate teachers more, especially when supported by school policy and curriculum.

4.2. Teachers' Perception of ICT Use

The study's initial objective was to understand English teachers' perceptions of ICT use in their EFL classrooms. Both teachers expressed positive attitudes towards ICT use. Karen highlighted that ICT is beneficial for accessing teaching materials, engaging students, increasing knowledge retention, and accommodating various learning styles. Elli added that ICT helps teachers become "more professional, more creative in searching for teaching materials." These positive attitudes align with previous research by Çelik & Aydin (2014), Park & Son (2009), Safitry et al. (2015), and Silviyanti & Yusuf (2015), all of whom found positive teacher attitudes towards ICT integration.

The findings also indicate that ICT is used to find teaching resources, a point supported by Schuck (2003) and Tondeur et al. (2007), who noted computers as valuable information tools. Furthermore, ICT provides authentic materials for students, consistent with Park and Son's (2009) findings that computers offer diverse language inputs and expand learning experiences in authentic contexts. Karsenti and Collin (2012) also support the idea that ICT increases access to various teaching resources. A significant finding was that ICT makes language learning more interesting and effective, a view echoed by Cahyani and Cahyono (2012), Silviyanti and Yusuf (2015), and Cox, Cox, and Preston (2000), who emphasized ICT's role in creating enjoyable, motivating, and diverse lessons.

4.3. Factors Influencing ICT Use

The second research question aimed to identify the factors influencing EFL teachers' decisions to use ICT. Several factors emerged: perceived usefulness, perceived ease of use, teachers' pedagogical belief, school policy, curriculum, accessibility, and professional development.

4.4. Perceived Ease of Use

The perceived ease of use of ICT significantly influenced the teachers' decisions. Elli found that ICT made accessing teaching materials easier, and Karen noted how Microsoft Excel automated student score calculations. The teachers also mentioned the utility of digital libraries and canteens, where students use digital money. This ease of access to teaching materials is consistent with Smeets (2005) and Schuck (2003), who highlighted ICT's role in providing abundant information and teaching resources. Karsenti and Collin (2012) further support that ICT increases access to various teaching resources. This finding confirms that perceived ease of use, as suggested by Davis et al. (1989), influences ICT adoption, implying that less effort required from teachers leads to greater ICT use.

4.5. Perceived Usefulness

Perceived usefulness was another major factor in ICT adoption. This aligns with Davis et al. (1989), who identified perceived usefulness as an influence on ICT use. The study found that ICT serves as a source of motivation, which is consistent with Angers & Machtmes (2005) who linked technology to improved lessons, increased student motivation, and enhanced teaching strategies. ICT also aids in classroom management, organization, and administration, allowing teachers to check student work, create exercises, and conduct tests.

Furthermore, ICT helps teachers provide authentic materials for students, a finding supported by Smeets (2005) and Park and Son (2009), who emphasized ICT's contribution to authentic learning environments and diverse language inputs. This is attributed to the Internet's vast resources for developing listening, reading, writing, and speaking skills.

4.6. Teachers' Pedagogical Belief

Teachers' beliefs were found to influence ICT adoption, consistent with previous studies by Angers & Machtmes (2005) and Eteokleous (2008), which established a strong relationship between teachers' beliefs and ICT adoption. Gilakjani and Leong (2012) also contended that teachers' attitudes towards computer use directly relate to their classroom use. This suggests that teachers' pedagogical beliefs are a significant factor in their use of ICT.

4.7. School Policy and Curriculum

School policy and curriculum demands also influenced ICT use. As an ICT-based school, SD Gammara Makassar mandated ICT integration, a finding that corroborates Vanderlinde et al. (2014) on the importance of a shared vision for ICT implementation in schools. Additionally, the Curriculum 2013 in Indonesia requires teachers to use ICT as a criterion for pedagogical and professional competence.

4.8. Accessibility

Easy access to ICT was a major factor influencing teachers' decisions. Participants reported that all school members had easy access to ICT, enabling extensive use in classrooms. This finding contradicts Cuban et al. (2001) but aligns with Mumtaz (2000), who stressed the need for adequate facilities and training for technology integration. The school's various applications for teaching, learning, and data management, coupled with adequate internet speed, further supported ICT use. Means and Olson (1997) and Kennewell et al. (2002) also supported the idea that sufficient access to software and hardware influences ICT use. Thus, ICT accessibility appears to be a significant factor.

4.9. Professional Development

Professional development played a crucial role in ICT integration. The teachers received ICT training from their school, covering topics like Google Classroom, Google Drive, Google Form, digital library, digital canteen, and Microsoft Excel. Bingimlas (2009) supports that training helps teachers use ICT more efficiently. However, Gilakjani & Leong (2012) and Eteokleous (2008) suggest that more hands-on, practical experience, beyond simple computer skills, is needed. Galanouli et al. (2004) noted that teachers are more likely to use ICT if they perceive the training as worthwhile. Brush et al. (2003) emphasized integrating computer use into the curriculum during training. Therefore, professional development should focus on both ICT skills and their integration into the classroom, which can motivate schools to provide more training.

4.10. The Challenges in Using ICT

Despite the positive perceptions and influencing factors, teachers faced challenges in implementing ICT.

4.11. Student Behaviour

Both teachers identified student behavior as a challenge. Students sometimes accessed unrelated websites or played online games during class. Additionally, some students preferred writing in textbooks over using tablets. This aligns with Hedayati and Marandi's (2014) finding that student behavior can be a barrier to CALL implementation.

4.12. Lack of ICT Skills and Confidence

The teachers perceived their ICT skills as insufficient, despite receiving training, and expressed a desire for more external training. This lack of ICT skills is consistent with previous research by Aydin (2013) and Hu & McGrath (2012). Furthermore, the participants lacked confidence in their ICT skills, a finding supported by Balanskat et al. (2006), Bingimlas (2009), and Lam (2000). Surprisingly, this lack of confidence did not deter them from using ICT in their classrooms.

4.13. *Suggestions for ICT Practice*

Both teachers strongly recommended ICT use due to its numerous advantages. Elli suggested that teachers should learn ICT to make teaching materials more interesting, efficient, accessible, and varied. She also highlighted the Internet's role in developing English skills (listening, speaking, reading, writing) and allowing students to choose which skills to develop. Karen advised teachers to be more creative with ICT, especially for potentially boring tasks, suggesting the use of songs and videos to motivate students.

In summary, the teachers extensively utilized various ICT tools and held positive attitudes towards their use, perceiving them as useful for accessing resources, providing authentic materials, and making learning engaging. Key influencing factors included perceived ease of use, perceived usefulness, teachers' pedagogical beliefs, supportive school policies and curriculum, easy accessibility, and professional development. Challenges primarily involved student behavior and the teachers' self-perceived lack of ICT skills and confidence, though these did not prevent ICT integration.

5. Conclusion

This study set out to understand the views and experiences of English teachers in an Indonesian primary school concerning ICT use in EFL classrooms and to identify the decisive factors contributing to its adoption. The findings offer valuable insights into the dynamics of technology integration in this specific educational context.

The core conclusion is that English teachers in the primary school held overwhelmingly positive attitudes towards ICT use and extensively utilized a diverse array of ICT tools in their classrooms. This widespread adoption was primarily influenced by several decisive factors: the perceived ease of use and usefulness of ICT, the teachers' underlying pedagogical beliefs, supportive school policies and curriculum mandates, the excellent accessibility of ICT resources, and the provision of professional development opportunities. These factors collectively create a "virtuous cycle" where strong institutional policy, readily available resources, and targeted professional development reinforce the perceived usefulness and ease of use of ICT. This environment not only enables but encourages and sustains ICT integration, potentially even compensating for individual skill gaps. This framework implies that for widespread and effective ICT integration in educational systems, a coordinated effort across policy, infrastructure, and human capacity building is essential; it is not enough to merely mandate, one must also facilitate and empower.

Despite these facilitating factors, the study identified key challenges, notably student behavior (e.g., accessing inappropriate content, playing games) and the teachers' self-perceived lack of ICT skills and confidence. The observation that teachers continued extensive ICT use despite expressing insufficient confidence is particularly compelling. This suggests that the robust supportive ecosystem provided by the school played a significant role in mitigating the impact of individual skill gaps and confidence issues, compelling and enabling teachers to use ICT even when they felt personally inadequate. The challenges identified, particularly student behavior and teacher confidence, point to a broader need for holistic digital literacy education, not just technical ICT skills. For students, this means digital citizenship and responsible online behavior. For teachers, it means not only technical proficiency but also pedagogical confidence in managing technology-rich classrooms and addressing student misuse. Simply providing access to ICT without concurrently developing comprehensive digital literacy for both educators and learners can lead to unintended negative consequences, undermining the pedagogical benefits.

The findings of this investigation complement and expand upon earlier studies by shedding new light on English teachers' perceptions of ICT use and the complex interplay of decisive factors within an Indonesian EFL primary school context.

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