

CHAPTER 1

INTRODUCTION

This chapter presents the background of the study, research questions, purposes of the study, scope and limitations, significance of the study, and state of the art.

1.1 Background of the Study

The rapid development of technology in the digital era has brought significant changes to various aspects of life, including the field of education. Technology integration in teaching and learning has become an important issue around the world, particularly in ensuring that its implementation is both effective and sustainable within education systems (Al-Emran & Griffy-Brown, 2023). At the global level, UNESCO (2022) has encouraged countries to develop national policies that utilize information and communication technologies (ICT) to expand and improve education systems in line with the Education 2030 agenda, including the integration of technological tools into classroom process. Recognizing the urgency of this global shift toward technology integration, the Indonesian government has also taken concrete steps by implementing the Digitalization of Learning Program.

According to Biro Pers, Media, dan Informasi (2025), the program is designed to ensure that all schools, both in urban and rural areas, have access to high quality educational technology ecosystem. The government's commitment is

further demonstrated in the provision of technological tools, particularly through the large-scale distribution of Interactive Flat Panels (IFP) to support teaching and learning activities (Patta et al., 2025). IFP is one of the latest educational devices in the form of large interactive display used in classrooms that is equipped with touch-screen features, multimedia functions, and cloud connectivity. As of November 2025, more than 173,000 of 288,865 schools across Indonesia, covering all educational levels, from early childhood education to senior high schools had received IFP units (Kemendikdasmen, 2025). According to Naitboho et al. (2025), the use of IFP is in line with the aims of 21st century education, which highlight the importance of developing critical, creative, communicative, and collaborative or 4C skills.

In the context of English as a Foreign Language (EFL), the use of IFP provides English teachers to present language materials more interactively and visually in EFL classrooms, which can help support the development of 4C skills (Kurniawan et al., 2024). This development signifies a change where technology is no longer regarded only as a secondary aid, but as a purposeful approach to improving the effectiveness of teaching practices. However, despite its potential to enhance classroom learning, the implementation of IFP in classroom practices is often not fully optimized. National data from BSKAP in 2023 show that only 23% of teachers feel confident using interactive digital media (Dewantara et al., 2025). This suggests that many teachers may still face challenges in integrating interactive technologies, including tools such as IFP. Moreover, preliminary observations at SMPN 172 Jakarta reveal a noticeable disparity between the availability of the technology and its pedagogical use. Regardless of the availability of the technology,

the integration of IFP into English teaching and learning activities in SMPN 172 Jakarta remains limited. Also, the use of IFP there is not mandatory, the teachers are given flexibility to decide whether and how the technology is used in their classrooms.

This situation suggests that the availability of technology alone does not necessarily ensure its effective use in teaching and learning. This finding is consistent with the study by Boonmoh et al (2021), which emphasizes that the existence of technology in classrooms does not automatically guarantee its educational value, as technological tools become meaningful only when they are effectively used into the teaching and learning process by the teachers. The study further emphasizes that decisions regarding whether and how technology is used in the classroom are largely influenced by teachers' individual perceptions toward technology use. This view is also supported by Koç et al. (2021), who stated that teachers play a central role in the successful integration of technology in educational settings and examining their perceptions and intentions to use technology is considered crucial. This situation highlights the importance of teachers having positive perceptions toward the use of technology to effectively integrated technology into their classroom.

In this context, to understand teachers' perceptions of IFP in the classroom, the Technology Acceptance Model (TAM) by Davis (1989), offers a relevant conceptual framework, as teachers' perceptions of technology is commonly shaped by its perceived usefulness and ease of use (Mahdum et al., 2019). According to Davis (1989) in Mahdum et al. (2019), perceived usefulness refers to the extent to which teachers believe that using a particular technology can improve their teaching

performance, while perceived ease of use relates to the degree to which teachers believe that the technology can be used with minimal effort. Although TAM has experienced several revisions since its introduction, these two constructs remain fundamental in explaining users' perceptions of technology.

Several studies have examined the use of IFP and related interactive display technologies in educational settings. Kasa et al. (2024) explored the use of IFP, interactive tablets, and artificial intelligence to support students' learning in rural secondary schools in India. Sharma and Masih (2023) and Saltan and Arslan (2013) employed the TAM to investigate students' and teachers' acceptance of interactive display technologies, highlighting their perceived usefulness and ease of use. In the Indonesian context, Riyadi and Ningsih (2024) examined the use of IFPD in a social studies classroom at the elementary school level. Despite these contributions, several research gaps remain. Most studies focusing on teachers have employed quantitative approaches (Saltan & Arslan, 2013), providing limited insight into teachers' experiences and the challenges they encounter when using IFP. In addition, many previous studies have focused on students rather than teachers (Kasa et al., 2024; Sharma & Masih, 2023), even though teachers play a central role in integrating technology into teaching and learning. Furthermore, studies investigating teachers' use of IFP at the Indonesian EFL junior high school level remain limited. Therefore, there is still a need to explore teachers' perceptions of their use of IFP in English teaching and learning, as well as the challenges they encounter, through the dimensions of the TAM.

To address the limited research on teachers' perceptions and challenges in using IFP, particularly at the Indonesian EFL junior high school level, this study

focuses on investigating English teachers' perceptions of using IFP in English teaching and learning, as well as the challenges they encounter when integrating this technology into classroom practices at SMPN 172 Jakarta. In this study, teachers' perceptions are conceptualized as their views on the perceived usefulness and ease of use of IFP as framed by the TAM. Within this framework, the challenges faced by teachers are viewed as factors that shape and influence teachers' perceptions and acceptance of IFP in classroom practice. By examining the perspectives of English teachers at SMPN 172 Jakarta as the primary users of IFP, this study seeks to provide a contextualized understanding of how the technology is perceived and utilized in English teaching and learning activities at the school, while also identifying the challenges that affect its integration.

1.2 Research Questions

Based on the background of the study, this study seeks to answer the following research questions:

1. How do English teachers perceive their use of an Interactive Flat Panel (IFP) in English teaching and learning?
2. What challenges do English teachers face in integrating IFP in English teaching and learning?

1.3 Purposes of the Study

In line with the background of the study and the research questions, the objectives of this study are:

1. To explore English teachers' perceptions of their use of IFP in English teaching and learning.
2. To analyse the challenges faced by teachers in integrating IFP in English teaching and learning.

1.4 Scope and Limitations

This study focuses on exploring English teachers' use of the Interactive Flat Panel (IFP) in English teaching and learning at SMPN 172 Jakarta. Guided by the TAM, the study examines teachers' perceptions of their use of IFP in terms of perceived usefulness (PU) and perceived ease of use (PEOU), as well as the challenges they encounter when integrating the technology into classroom practices. This research was conducted using a qualitative case study approach.

However, several limitations should be acknowledged. First, this study is limited to four English teachers at SMPN 172 Jakarta. Therefore, the findings represent the experiences of a relatively small number of participants within a specific educational context and cannot be generalized to other schools or EFL teachers with different technological resources, institutional conditions, or teaching contexts. Second, this study does not aim to investigate students' perspectives or measure the impact of IFP on students' learning outcomes. Instead, students' classroom responses and behaviours are treated only as contextual data to support the interpretation of teachers' experiences.

Furthermore, classroom observations were conducted only once for each participating teacher. As a result, the observations may not fully capture teachers'

instructional practices across different lessons or classroom situations. In addition, the findings relied primarily on teachers' self-reported experiences obtained through semi-structured interviews. Although classroom observations were used to support the interview data, not all reported experiences could be directly verified. Moreover, the interview protocol and classroom observation guideline used in this study were developed based on relevant literature but were not pilot-tested or validated by experts prior to data collection.

1.5 Significance of the Study

Theoretically, this study contributed to the literature on technology integration in EFL contexts by examining teachers' use of IFP through the lens of the TAM. This study adopted a qualitative case study approach to offers more contextual and practice-oriented understanding of using IFP for English teachers.

Practically, the findings of this study are expected to provide insights into how English teachers at SMPN 172 Jakarta perceive and respond to the introduction of IFP in their classroom practices. By identifying both teachers' perceptions and the challenges they face during integration, this study may inform teachers' reflective use of IFP in English instruction. In addition, the findings can support school administrators and educational policymakers in designing more relevant development and support strategies that address teachers' actual needs, rather than focusing solely on technological provision.

1.6 State of the Art

Previous studies on IFP have largely highlighted its advantages in supporting classroom learning (Kasa et al., 2024; Riyadi & Ningsih, 2024). However, most of them focus more on students rather than teachers. As a result, teachers' perspectives as the main users of the technology have not yet been explored in depth. Some researchers have also used TAM to examine the adoption of interactive displays (Saltan & Arslan, 2013; Sharma & Masih, 2023). However, there are still several limitations. The study by Saltan and Arslan (2013) was conducted more than ten years ago, which may not fully reflect current classroom conditions and technological developments. Meanwhile, Sharma and Masih (2023) mainly focused on students' perceptions rather than teachers' perception. Moreover, there is also a lack of qualitative research exploring teachers' experiences and challenges in using IFP, as many previous studies mainly focus on quantitative approaches. In addition, most of these studies were also carried out outside Indonesia. Even though Riyadi and Ningsih (2024) examined the use of IFP in Indonesia, their research was conducted at the elementary level and focused on Social Studies, not on English teaching at the junior high school level.

These limitations indicate a research gap regarding how Indonesian junior high school English teachers perceive and experience using IFP through the key dimensions of TAM. Therefore, this study aims to investigate English teachers' perceptions of using IFP and the challenges they face in integrating the technology into English teaching and learning at SMPN 172 Jakarta. The novelty of this study lies in its focus on English teachers at the Indonesian junior high school level and

its use of a qualitative case study approach to provide an in-depth understanding of teachers' experiences and challenges in using IFP in classroom practices.

