CHAPTER I

INTRODUCTION

This chapter offers an in depth introduction to the present study. It discusses the research background, highlights the identified problems, establishes the scope and limitations, articulates the research questions and objectives, and elaborates on the study's significance.

1.1 Background of the Study

At present, technological advancement plays a significant role in everyday life, particularly in the field of communication, while its advantages also extend to many other areas. In professional environments such as offices, individuals are expected to possess technological competence in order to accomplish their tasks efficiently; similarly, technology contributes to the field of education by creating a more dynamic learning environment for both teachers and students. The use of technology and communication systems has expanded across numerous sectors (Hadijah & Shalawati, 2018). Within the educational context, teachers may integrate technology into instructional activities conducted both inside and outside the classroom, with the expectation that it will provide innovative learning experiences and enhance the overall quality of students' learning outcomes.

The twenty-first century is widely recognized as the digital era, during which nearly all sectors, including education, are encouraged to undergo digital transformation and where technology holds a central role in the learning process (Henriksen & Mishra, 2016). In response to these technological developments,

various digital platforms are now commonly employed in schools to support teaching and learning activities. Within educational practice, ICT tools are commonly grouped into two broad categories: non web based learning and web based learning. Non web based learning refers to instructional media such as radio, television, films, language laboratories, and overhead projectors. By contrast, web based learning incorporates digital platforms including YouTube, email, blogs, Skype, mobile phones, and iPods (Abdulkareem Alkamel et al., 2018). These technological forms are not merely delivery instruments but can generate direct learning experiences that influence student participation and engagement. Experiential learning, as emphasized by Barger et al. (2019), depends substantially on the instructor's guidance in reflection and self assessment, enabling learners to connect concrete experiences with abstract understanding. Nevertheless, XR technology does not automatically replace this pedagogical role. Instead, its strength lies in intensifying experiential dimensions within the learning environment. By extending the variety of tasks and practical activities available to learners, XR technology facilitates active engagement and supports experiential learning in contexts that were previously difficult to realize through conventional instructional approaches.

Furthermore, recent technological advancements such as Artificial Intelligence (AI) have also contributed positively to student learning. AI-based tools represent an emerging and rapidly developing field within educational technology, and many scholars argue that these innovations offer substantial benefits for both students and teachers (Pokrivcakova, 2019). AI-powered education (AIEd) provides learning experiences that are more personalized,

adaptive, inclusive, and engaging. It equips classrooms with tools that allow educators to evaluate not only what students learn, but also how they learn and how they respond during the process. As a result, students are better prepared to acquire the knowledge and skills demanded by employers, while teachers are supported in designing more sophisticated and effective learning environments.

In response to ongoing technological advancement, the government has introduced several educational policies that align with contemporary developments. Within the context of education in Indonesia, a number of reforms have been implemented, including the Merdeka Curriculum and the adoption of student centered approaches. These policies reflect efforts to adapt the educational system to current demands shaped by technological progress. According to Pouw and Mulyanti (2023), the Merdeka Curriculum was specifically developed to promote greater flexibility and adaptability within the national education system. This curriculum emphasizes essential competencies while fostering students' character development and skill enhancement. The government has introduced several key components intended to strengthen students' learning capacities under the new curriculum framework. These elements include project-based activities aimed at developing soft skills and character formation, the allocation of sufficient time for fundamental subjects such as reading and mathematics, and the provision of autonomy for teachers to modify instructional strategies based on students' individual abilities. Regarding perceptions of the Merdeka Curriculum, Tanjung and Faiza (2019) report that English teachers generally express positive attitudes toward preparing lesson plans within the Independent Curriculum framework. Most participants indicated satisfaction in designing lesson plans aligned with the

Independent Curriculum, and responses to open-ended questions suggest that some teachers find the process more manageable under this system. Furthermore, teachers are granted greater freedom in determining learning objectives and organizing classroom activities. From the students' perspective, the majority reported enthusiasm toward learning under the Independent Curriculum, as reflected in 56.78% of students expressing high enthusiasm and 28.65% indicating positive interest. Several students acknowledged that the curriculum offers a novel learning experience; however, 7.75% reported lower levels of enthusiasm, perceiving the Independent Curriculum as excessively flexible (Sutrisno et al., 2023). In addition, the implementation of AI applications has significantly transformed the teaching of Indonesian language courses in universities across the country (Hasibuan et al., 2023). Research findings indicate that the integration of AI tools, including chatbots, speech recognition systems, and automated assessment technologies, has significantly enhanced the effectiveness of language learning. AI-powered learning provides students with more personalized experiences and contributes to the improvement of speaking skills. The Independent Learning Curriculum further supports this approach by enabling students to tailor their learning processes and actively participate in knowledge construction. Its evaluation and feedback mechanisms promote continuous development and emphasize student-focused learning. These findings offer meaningful insights for educational institutions in integrating AI effectively into language learning to create more interactive and individualized instructional environments. Future studies are encouraged to explore innovative strategies to optimize the use of AI in language education in order to further enhance educational outcomes. The transformation of

education in Indonesia, driven by technological advancement, increasingly emphasizes a learner-centered orientation. According to Purnamasari et al. (2020), this approach is referred to as Student Centered Learning, which allows students to construct their own understanding and achieve deeper, higher-quality learning. The 2013 Curriculum highlights this perspective and calls for a shift in mindset toward student-centered rather than teacher-centered instruction to achieve optimal results. Learning processes are also expected to be engaging and enjoyable. In the digital era, teachers are therefore required to adapt by utilizing technology and internet-based resources as integral tools in teaching.

The integration of technology in learning should be introduced from an early stage so that students become familiar with and accustomed to its use, particularly at the junior high school level. Zayyinah et al. (2022) explain that their study investigates how technology is utilized by early adolescents in learning contexts. High Technology Based Learning (HTBL) has become increasingly prevalent; however, concerns remain regarding its potential negative effects, especially for junior high school students in their formative years. The study further examines the implications of HTBL for middle school students in Yogyakarta. The researcher applied a data collection method that focused on participants' personal experiences, based on the assumption that individuals are the most reliable sources for understanding their own learning processes. The participants were purposively selected, consisting of junior high school students aged 11–13 years who reside in Yogyakarta and are engaged in High Technology Based Learning (HTBL) at school. The findings indicate that, for these students, HTBL plays a significant role in enhancing self-awareness. The study also recommends collaboration between

parents and teachers in supporting HTBL implementation both at school and at home, as their involvement strongly influences how students utilize technology. Effective technology integration is not merely a matter of adopting digital tools, but requires an integrated understanding of technology, pedagogy, and content as interconnected domains. This perspective underpins the study conducted by Jannah et al. (2022), which utilized a systematic review combined with a metasynthesis design to examine how Pedagogical Content Knowledge (PCK) is aligned with technological integration in junior high school science education in Indonesia. The investigation drew upon publications indexed in SINTA rankings 1 to 6 between 2016 and 2020 and applied the Preferred Reporting Items for Systematic Review and Meta Analysis (PRISMA) framework for data analysis. The review focused on key dimensions of Pedagogical Content Knowledge, namely Orientation to Teaching Science (OTS), Knowledge of Instructional Strategies for Teaching Science (KIS), Knowledge of Student Understanding in Science (KSU), Knowledge of Curriculum (KC), and Knowledge of Assessment of Science Learning (KAS), as foundational components of effective instructional practice.

The influence of ICT extends across various sectors, with education emerging as one of the most significantly affected domains. Within classroom settings, technology is implemented through a spectrum of tools, ranging from simple instructional resources such as paper, natural materials, or WhatsApp to more advanced systems including machine learning and Artificial Intelligence. This technological expansion has reshaped instructional practices and contributed to the growing appeal of innovative learning models among students. As a result, technology now occupies a central position in shaping contemporary learning

processes and redefining the dynamics of classroom interaction. Rather than focusing solely on training teachers to operate specific software and hardware, teacher preparation programs should prioritize developing a comprehensive understanding of the complex relationships among artifacts, users, tools, and instructional practices (Mishra and Koehler, 2006). This broader perspective highlights that technology integration involves more than technical skills alone. The distinction between learning technologies and Educational Technology is often blurred, particularly when approaches such as instructional multimedia, web based learning, and computer assisted learning are treated as synonymous with the broader concept of Educational Technology (Herrington and Oliver, 2000). In practice, despite differences in terminology, these approaches converge in their shared objective of integrating technology to strengthen teaching and learning processes. This perspective aligns with (Alkamel & Chouthaiwale, 2018), who contend that the implementation of ICT has proven capable of enhancing both the quantity and the quality of classroom learning experiences.. Therefore, ICT is considered an important tool for enriching classroom instruction by providing dynamic and interactive content that supports individual learning development.

Technology plays a substantial role in shaping instructional practices in the classroom, as its implementation is expected to create more varied and engaging learning experiences. In addition to improving instructional delivery, technology contributes to the development of innovative learning media and assists teachers in managing classroom tasks, including assignments and assessment procedures (Bidarian et al., 2011). Various reports issued by international organizations, including UNESCO, indicate that recent advances in information technology have

the potential to fundamentally transform educational systems. In contemporary societies characterized by diverse interests and continuous innovation, learning processes likewise become more diverse and adaptive. It is clear that the learning process needs to adopt an updated framework accompanied by adequate reflection in order to remain aligned with ongoing technological developments, thereby creating a learning experience that differs from conventional classroom practices. The integration of technology into education can create distinct learning experiences, and its widespread implementation across various levels of society contributes to the development of an engaging and relevant learning environment. Alkamel and Chouthaiwale (2018) state that in the present era, technological advancement has progressed at an increasingly rapid pace. The global application of ICT as a tool to enhance classroom instruction clearly demonstrates its effectiveness. Moreover, the use of technology extends learning opportunities beyond formal schooling, enabling individuals who do not attend school or who rely on home based learning to access education and knowledge from their own homes.

Basically, the role of a teacher in the classroom has been to deliver material, provide explanations, and guide students according to established textbooks and instructional resources. However, contemporary developments require teachers to adopt more creative approaches by aligning instructional practices with rapid technological progress. Within the latest curriculum framework, students are encouraged to assume a more active and independent role in their learning processes. In this context, teachers function not only as providers of knowledge but also as facilitators who supply learning materials for independent

study while continuously monitoring students' progress to ensure effective learning outcomes. (Nnaekwe & Ugwe, 2019) explain that the shift in emphasis from teaching centered instruction to learning centered approaches aims to create more interactive and meaningful classroom experiences. This transformation requires teachers to redefine their roles, moving beyond simply delivering content to becoming facilitators, knowledge navigators, and at times collaborative partners in the learning process.

The integration of technology into everyday life has inevitably influenced the way English is learned, both within and beyond classroom settings. In EFL contexts, technology provides varied learning experiences that can enhance students' engagement and promote greater autonomy in practicing language skills. Through the use of digital tools, learners are able to develop their proficiency independently while cultivating stronger motivation to study English. Altun (2015) notes that incorporating technology into English instruction yields beneficial outcomes for both students and teachers. By enabling interaction and facilitating communication between teachers and learners, technological media such as computers, the internet, smart boards, mobile phones, video games, and audio devices serve as effective supports in the instructional process. The use of these technological resources significantly enhances students' motivation in learning English.

Furthermore, incorporating technology into language teaching enables students to express their ideas and apply their knowledge of the target language more actively. Technology oriented learning emphasizes student independence, while teachers function as facilitators who guide and monitor the learning process

to ensure alignment with instructional objectives. This approach encourages students to think creatively while practicing the target language (Al Mahrooqi and Naqvi, 2014). Consistent with Jayanthi and Kumar (2016), ICT has been shown to address various limitations in English language learning by enabling the implementation of strategies tailored to students' needs. In addition, the use of ICT enriches students' learning experiences by providing broader opportunities to understand, reflect on, and analyze the target language both within and beyond classroom settings.

1.2 Problem Identification

The implementation of ICT has become a common strategy in efforts to improve the effectiveness of learning. English, as a global language, holds significant importance for students in supporting their academic development. In the integration of ICT into English language learning, students are encouraged to engage in independent study; however, the presence of a teacher remains essential to facilitate and guide ICT based instruction. Through appropriate facilitation, ICT can provide various benefits for students, including increasing learning motivation. It also contributes to the development of student creativity and fosters greater autonomy in their English learning process. On the other hand, we don't know much about how teachers in these schools are actually using technology to teach English. Are they pulling out projectors, tablets, or maybe using something like Google Classroom? How are they weaving these tools into their lessons to keep students hooked? And what kind of obstacles are they facing maybe unreliable Wi-Fi, not enough training on how to use tech, or even students who aren't quite sure how to handle these tools? These are important questions, especially since private schools

in Singaraja often deal with different challenges than bigger schools in cities. This study aims to get to the heart of these issues, looking at what tech teachers are using, how they're making it work in their classrooms, and what solutions could help them tackle any problems to make English lessons even better for their students.

1.3 Research Gap

There's a lot of research out there about using technology to teach English as a foreign language, showing how tools like online platforms and apps can make learning more engaging, boost students' confidence, and open up new resources. Studies like those by Alkamel and Chouthaiwale (2018) and Khanh (2021) highlight these benefits, but they mostly look at big cities or schools with plenty of resources. What's missing is a closer look at places like Singaraja, North Bali, where private junior high schools might not have the same access to things like fast internet, modern computers, or even teachers who feel confident using tech. Every place has its own challenges maybe it's spotty Wi-Fi, teachers who haven't had much tech training, or even local attitudes about using technology in the classroom.

1.4 Research Limitation

This study examines the implementation of ICT in English language instruction at private junior high schools in Singaraja, with particular attention to the types of hardware and software utilized in classroom practices. Employing a qualitative descriptive approach, the research explores how technology is integrated into English teaching activities. The analysis centers on identifying the hardware and software used by English teachers and evaluating the manner in which these technological tools support the teaching and learning process.

1.5 Research Question

Based on the identified issues, several research questions arise, including the research:

1. What kind of hardware that teachers use in teaching English private junior high school in Buleleng?
2. What kind of software that teacher use in teaching English at private junior high school in Buleleng?

1.6 Research Objectives

This study establishes several research objectives formulated in response to the previously stated research questions:

1. To identify the types of hardware utilized by teachers in teaching English at private junior high schools in Buleleng.
2. To identify the types of software employed by teachers in teaching English at private junior high schools in Buleleng.

1.7 Research Significances

In this study, there are two significances that desired to be able achieved from the result of the research.

1.7.1 Theoretical Significance

The findings of this study are expected to provide meaningful contributions to the development of teachers' instructional strategies, thereby supporting the improvement of classroom practices. In addition, the study is anticipated to serve as a valuable source of

motivation and professional learning experience for the researcher in the process of becoming a competent and effective teacher.

1.7.2 Empirical Significances

a) *For Private Junior High School in Singaraja*

The results of this investigation are expected to support teachers in improving classroom management within the research area and to provide additional knowledge for other teachers regarding the implementation of ICT in the classroom as a potential strategy to enhance students' learning motivation.

b) *For Universitas Pendidikan Ganesha*

The results of this research are expected to provide new and updated knowledge to improve instructional strategies and to strengthen the understanding of learning materials for both lecturers and students.