

CHAPTER I

INTRODUCTION

A. Background of Study

Technology make easier for us to get information and communicate in social activities, according to Daryanto Setiawan (2018) Information and Communication Technology is a human skill to convey information to solve problems. In addition, new technology can change the habits of people, technological changes have an impact and influence on culture in society. The ongoing reflection on education and technology highlights how technology affects education in different ways. It identifies both challenges and opportunities that come with using technology in schools. This reflection helps ensure we recognize the true value of technology in education.

Nowadays, Technology is widely used in education, both in the form of teaching and learning. technology has become widely integrated across both school and university levels, encompassing the use of projectors, audio, video, online learning platforms, and educational games as instructional tools.

Every time technology will continue to develop more sophisticated and newer. Of course, humans need to prepare to adapt to future technological developments. Technology is a key part of life in the 20th century, known as

the fourth revolution, bringing both challenges and opportunities. technology is not just tools, but also reflects our attitudes toward life.

The impact of technology in education is not straightforward; while it offers many benefits, it also brings challenges. These are connected to the nature of technology as a socially influenced medium. (Anita L. Cloete, 2017). Furthermore, Raja and Subramani (2018) states, The 21st century is widely recognized as the era of technology, where technological advancements play a crucial role in various aspects of life. Technology is considered a fundamental driver of economic growth, and economies lacking technological development struggle to progress in the modern world.

This is due to the fact that technology enhances efficiency, streamlines processes, and reduces the time required to complete tasks. Its influence is evident across numerous sectors, including education, where it has significantly transformed traditional learning methods

In this era of information technology schools and university carry out development integrate technology into their learning process, and its impact on their education has been significant. Research indicates that the use of advanced technological tools and equipment enhances both student engagement and interactivity in learning. Technology makes the learning experience more dynamic and engaging, creating an environment filled with stimulating and interactive elements

This suggests that our cognitive processes function more rapidly when supported by modern technology, particularly in the field of education. The reliance on such innovations, which simplify and streamline various aspects of life, has become inevitable, extending to schools, universities, and colleges. In addition, the future of technology will present a challenge to the field of education, affecting both students and instructors

Today's technological changes are affecting education in a positive and negative way, according to Maritsa et al (2021) The positive influence of technology in education includes making it easier for every student to find information, science, and the breadth of insight for learners.

Furthermore, technology provides many benefits for education, there may also be drawbacks. Teachers and students should make the most of this and remove the obstacles that prevent many kids and schools from reaching their full potential. Therefore, it is imperative that all nations implement a more technologically advanced education system going forward (Raja & Nagasubramani, 2018). In this case, it is possible that teachers need more effort to find ways of teaching that do not allow negative impacts on future learning in the face of newer technological advances

The new coming up technology might be changing the process in learning and teaching. Bates (2006) states, that newest technologies certainly bring us the promise of any course held anytime, anywhere, the promises of international courses between students and teachers in the world. Technology

promises more effective learning, a more learner-centered approach, and better quality of interactions. At the same time, it is important not to be carried away by hype

According to Arifin and Setiawan (2020) The 21st century teacher is demanded not only to be able to teach and manage class activities effectively effective, but also required to be able to build effective relationships with students and school community, using technology to support the improvement of teaching quality, as well reflect on and improve their learning practices continuously. current reality there are still old generation teachers who are lagging behind in technology with the constraints stated by M. Zainal Arifin and Agus Setiawan (2020), namely teachers may refuse to learn new technology, secondly teachers work in an environment where professional development is under stress and Undervalued by their superiors, the three new technologies take them out of their comfort zone. Technology is needed by teachers to play more of a facilitator role. This new role contradicts traditional teaching methods and allows learning to occur no direction.

In the Quran surah Anbiya verses 80-81:

وَعَلَّمَنَهُ صَنْعَةً لَبُوسٍ لَكُمْ لِتُحْصِنَكُمْ مِنْ بَاسِكُمْ فَهَلْ أَنْتُمْ شَكُورُونَ ٨٠

وَلَسْلَمِينَ الرِّيحَ عَاصِفَةً تَجْرِي بَأْمِرِهِ إِلَى الْأَرْضِ الَّتِي بَرَكَنَا فِيهَا وَكَنَّا بِكُلِّ شَيْءٍ عَلَمِينَ ٨١

The verse tell the story of Allah gave Prophet David the knowledge and skill to make soft iron in his hands without heating it, because of this special ability David was able to make the armor that people of that time used as protection in war. Based on the verse tells us that the prophet David was given knowledge to adapt in learning how iron metal could be processed into armor for war. This is evidently linked to the continuous advancement of technological change in the modern era, which necessitates the acquisition of knowledge and skills to effectively adapt to emerging technologies in the future.

In making above technological change has been around for centuries, in this case teachers must be able to adapt to new technology so as not to become obsolete and the teachers can facilitate the learning. According to Raja & Nagasubramani (2018), Students in the modern era increasingly utilize technology as a fundamental tool to enhance their learning experience. Over the past decade, the internet has become an essential component of the education sector, significantly contributing to academic advancement. Despite certain challenges, such as security risks and misinformation, the internet remains an invaluable resource for students. Its integration into various devices, including televisions, gaming consoles, and smartphones, ensures seamless accessibility.

Moreover, the internet provides students with unparalleled convenience by granting access to educational tutorials, academic support, and a vast array

of learning materials that contribute to their intellectual development. The use of visual aids, such as projectors and multimedia presentations, has also emerged as an effective pedagogical tool. Research indicates that visual content tends to be more engaging and impactful than text alone. Leading educational institutions worldwide incorporate advanced visual technologies, such as PowerPoint presentations and digital projections, to foster an interactive and stimulating learning environment. The incorporation of these technological tools enhances student engagement, increases motivation, and facilitates a deeper understanding of complex concepts through visually appealing and interactive content.

Furthermore, the integration of digital media within the education sector has significantly improved communication and accessibility. Digital platforms enable continuous connectivity between students and educational resources, allowing for efficient collaboration, academic discussions, and assignment assistance. With the rapid advancement of technology, an increasing number of digital applications and tools are being developed to further support student learning and academic progress. The increasing prevalence of online education has also transformed the academic landscape.

Many individuals now opt for online courses and certification programs due to their flexibility and accessibility. Prominent academic institutions offer comprehensive online programs, utilizing sophisticated digital platforms and internet-based learning tools. This trend is particularly advantageous for

working professionals and students seeking adaptable study options. As awareness and technological infrastructure continue to improve, online education is expected to gain even wider acceptance and popularity on a global scale. Technology has become an integral component of contemporary education, offering students innovative methods to enhance their academic experience. Through digital connectivity, interactive learning tools, and flexible study opportunities, technology continues to revolutionize the education sector, making knowledge acquisition more efficient, accessible, and engaging.

In this context, it is essential for educators to develop strategy to adapt the rapid advancements in technology in the future. By doing so, they can remain relevant in the evolving educational landscape and implement more effective teaching methods that enhance student engagement and learning outcomes.

This study is focuses on high school teachers' strategies in EFL teaching to cope with technological change in future. Alisjahbana I. (1966) states that the approach to education and training would later become in accordance with the times. New teaching techniques that are collaborative and interdisciplinary in nature will emerge. Furthermore, With the rapid advancement of technology and the increasing familiarity of younger generations with the latest innovations, teachers face greater challenges in developing effective teaching strategies to remain up to date. This study aims to explore how educators adapt

to emerging and previously unforeseen technological developments in English language teaching.

The rapid and continual advancement of technology is consistently reshaping the educational landscape, requiring educators to adapt to emerging tools and innovations as each new wave of technological development ushers in a distinct era in education. Undoubtedly, the integration of emerging technologies into the educational sector necessitates that teachers be prepared to adapt, effectively utilizing these innovations and incorporating them into their instructional practices. DeCoito and Richardson (2018) argues Technology can only be effective in the classroom when educators possess a thorough understanding of both the technological tools and their pedagogical applications aligned with educational objectives. Although the use of technology in educational settings is on the rise, its integration should primarily aim to enhance student learning outcomes

In the process of integrating technology into educational practices, teachers inevitably encounter a range of efforts and challenges. These challenges may include the need to develop new digital competencies, adapt existing pedagogical strategies, and stay abreast of rapidly evolving technological tools. Successfully navigating this transformation requires not only a willingness to embrace change but also ongoing professional development and institutional support to ensure effective and meaningful use of technology in teaching and learning.

In additions Teacher stress and anxiety related to educational technology have increased significantly over time. Recent studies reveal notable differences from earlier research, as past concerns have evolved and new challenges have emerged. These issues can hinder effective technology integration and impact teaching quality. To address this, ongoing professional development is essential to equip teachers with the skills and resilience needed to manage technological demands in education (Batanero et al., 2021).

Numerous studies have shown that the new challenges teachers encounter can negatively impact their personal and social well-being. For instance, research examined the connection between burnout and perceived competence among mid-career primary and secondary school teachers in Queensland. The results indicated that burnout and anxiety often emerge when teachers feel uneasy in their work environment due to a lack of confidence in their own competence. Integrating educational technology into the classroom presents a significant challenge for teachers who lack a sense of competence. A teacher's willingness to adopt such technology is influenced by a combination of self-concept, anxiety levels, and gender. To address and overcome these challenges, providing training in technological skills is essential (Batanero et al., 2021)

Therefore, this study aims to explore the ways in which teachers adapt to the rapid and continual advancements in educational technology, recognizing that such adaptations are not without significant challenges. The technology of

today shortly becomes the technology of yesterday in education. Technology and its uses are constantly changing to incorporate new ways of managing interactions on the digital plain (Dede, 2010). Thus, how teachers integrate technology into the classroom is a constantly moving target. As technology continues to evolve, educators are expected to modify their instructional practices, acquire new digital competencies, and navigate complex educational environments. This research seeks to understand the strategies employed by teachers to manage these transitions and the potential obstacles they face, with the broader goal of informing policies and professional development programs that support effective and sustainable technology integration in education

In the Language Development Unit (UPB) program at UIN Antasari, a significant number of novice instructors employ technology-based pedagogical approaches, such as the integration of audio, video, websites, educational games, and smartphones, in their teaching practices. Accordingly, this study seeks to investigate the effort these instructors employ to adapt to the technological tools that are increasingly utilized in teaching. The Language Development Unit (UPB) at Antasari provides technological facilities such as projector screens and internet access. Additionally, several teachers at UPB independently supply their own technological tools, including audio speakers, tablets, and even personal projector screens.

Despite the limited availability of facilities, this situation demonstrates the teachers' adaptive efforts at UPB. They exhibit adaptability by utilizing the

technological resources provided by UPB while also integrating self-initiated innovations and external technologies into their teaching practices.

This study aims to explore the various efforts undertaken by English Tutors' at UPB to adapt to educational technological change in general. It seeks to examine how they respond to the rapid integration of digital tools in teaching and learning activities, as well as the strategies they employ to overcome the challenges associated with learning and mastering new technologies. Furthermore, the study investigates how these adaptations are reflected in their classroom practices, particularly in their ability to effectively incorporate technological media to enhance teaching effectiveness and student engagement.

B. Definition of Key Terms

This study aims to explore how educators will cope and adapt to future technological advancements and the strategies they will develop to effectively incorporate these innovations into their teaching practices as technology continues to evolve.

1. UPB English Tutors'

Tutors' refers to professional educators who are actively involved in teaching English within the Language Development Unit (UPB) program at Antasari University, Banjarmasin. Their role includes facilitating students' language development through structured instruction and supporting the

university's efforts to enhance English proficiency among learners across various academic disciplines.

2. Tutors' Effort

Refers to teachers' efforts towards the upcoming arrival of new technology. This refers to the efforts employed by teachers or tutors in responding to technological changes within the field of education, which inevitably present challenges in the integration of technology into instructional practices. These challenges necessitate that teachers continuously adapt their teaching methods to effectively incorporate emerging technologies in order to enhance student learning in the future

3. Educational Technological Changes

This refers to the ongoing evolution of technology within the educational landscape, beginning with the emergence of computers and the internet, followed by the rise of online learning platforms such as Google Meet, and more recently, the integration of artificial intelligence (AI) into teaching and learning activities. These technological developments significantly influence how teachers adapt their instructional practices. The example of evolution of technology in education are digital platforms such as Quizizz, Kahoot, Google Meet, and Zoom, as well as emerging technologies based on artificial intelligence. These tools support various

aspects of teaching and learning, including assessment, engagement, collaboration, and remote instruction

4. Tutors' Experiences

This refers to teachers in experiencing teaching that involved technology such as online teaching, computer moreover mobile phone. Le Callet (2013) states that experience can be defined as an individual's continuous process of perceiving and interpreting one or more events.

5. Tutors' Challenges

Refers to teachers what problem they face in adapting educational technology. Some of the challenges encountered by teachers include experiencing technological stress, difficulties in explaining technological media to students, the need to modify teaching methods and techniques in accordance with technological developments, insufficient institutional support and facilities, and limited implementation of technology within classroom practices (Batanero et al., 2021)

C. Research Questions

This study aims to find out what effort is needed by tutors to teach with the latest technology. With the aim of finding out how teachers are adapting to technological changes the research question settled such as:

1. How are tutors' experiences in adapt with technological changes?
2. What Challenges do the Tutors' experiencing in using technology?
3. What efforts do the UPB English Tutors' in adapting Educational Technological Changes?

D. Objectives of Study

According to the research question, this study is aim to:

1. To find out the tutor's experience in adapting Educational Technological Changes
2. To find the tutor's Effort in adapting in Educational Technological Changes

E. Significance of Study

This research is benefit to teachers' how importance of paying attention to technological changes in teaching to create conditions to educate future

generations of students. This study is expected as a reference in the future when the new technology never existed in the present will emerge in the future section of the study mentions the theoretical and practical implications or the contribution of the study. Batanero (2021) founded over the past several decades, educational technology has played an increasingly significant role in both the educational process and the professional development of teachers. However, its integration has also introduced psychological challenges, often stemming from factors such as insufficient training and the pressure to effectively implement these tools.

This study is significant as it provides insight into how educators experience and adapt to emerging technologies within contemporary classrooms. By examining teachers' interactions with tools that were unavailable in previous educational eras, the research contributes to the growing body of literature on technology integration in pedagogy. Practically, the findings may inform professional development programs, helping institutions better support teachers in navigating technological change. Thinh Le et al (2022) founded in their research the majority of teachers surveyed conducted limited activities aimed at promoting student-to-student interaction. Regarding student-content interaction, although all teachers assigned homework, some did not verify whether students actively engaged with the learning materials.

In terms of student-teacher interaction, most educators adopted a traditional synchronous teaching approach, primarily delivering lectures while sharing their screens. Asynchronous communication was maintained through various online platforms. Efforts to enhance student engagement included calling on students during lectures; however, some students remained unresponsive and disengaged. Thus, unresponsive and disengaged student participation in online lessons may indicate that teachers have not yet fully adapted to effective online teaching practices. Consequently, this study aims to examine how teachers adapt to the evolving landscape of educational technological changes and how they prepare themselves to meet future demands in digital instruction.

Furthermore, this study can serve as a foundation for future research exploring long-term impacts of digital adaptation on instructional effectiveness and student outcomes. This is driven by the rapid pace of technological change occurring today, ranging from the implementation of online learning activities to the use of digital games on smartphones.