

## **CHAPTER IV**

### **FINDINGS AND DISCUSSION**

#### **A. Findings**

In the interviews conducted, five participants shared their personal experiences regarding their reasons for choosing to either use or refrain from using technology in their teaching practices. Borisenkov et al (2021) finds that The global educational landscape is currently undergoing a profound transformation, characterized by the accelerated integration of digital technologies and associated systemic changes. In this regard, this research was conducted to find out how participants prepare themselves to face technological changes in the world of education. Although their experiences and challenges in responding to technological changes varied, the participants demonstrated relatively similar efforts and strategies in managing these changes. Moreover, they exhibited comparable approaches in preparing themselves to adapt to future technological advancements in education.

The participants' experiences and challenges were categorized into distinct themes, as each participant encountered them in unique ways. Their challenges and experiences varied, as did their emotional responses to adapting to technological change. Despite these differences, participants demonstrated notable similarities in their efforts to adjust to technological advancements.

This study, which involved five participants, is organized into three primary sections: experiences, challenges, and efforts, along with an examination of how teachers prepare to engage with emerging technologies in the future. Some of the key challenges faced by UPB teachers include limited facilities and institutional support for integrating new technologies into classroom instruction. Additionally, several participants reported difficulties due to limited familiarity with certain educational technology tools and the complexity involved in preparing and applying these technologies effectively in teaching contexts.

Both teachers and students occasionally demonstrate limited familiarity with technology-based learning platforms such as Quizziz and Kahoot, which consequently requires teachers to exert additional effort in designing and managing instructional activities. Successful implementation of such technological tools in the classroom often provides teachers with a sense of accomplishment and satisfaction, as it reflects their ability to effectively utilize and adapt to previously unfamiliar technologies. Conversely, when confronted with technical difficulties or system errors, teachers may experience confusion and anxiety due to insufficient technical knowledge or troubleshooting skills. In certain situations, these challenges necessitate modifications to instructional strategies, leading teachers to alter or adjust their teaching methods during the lesson to maintain the continuity and effectiveness of the learning process.

Despite the various challenges and difficulties encountered in the process of integrating technology into teaching and learning, there are also significant conveniences and advantages that contribute positively to educational practice. The use of technology allows teachers to easily access, organize, and manage student grades, thereby improving efficiency in assessment and record-keeping. Furthermore, technology enables teachers and students to obtain information quickly and from diverse sources, which supports a more dynamic and resource-rich learning environment.

The incorporation of multimedia elements such as videos also enhances the clarity and engagement of instructional delivery, allowing complex concepts to be explained more effectively. In addition, online platforms provide teachers with the flexibility to conduct and monitor classes remotely, facilitating distance learning and enabling continuous interaction between teachers and students regardless of geographical constraints. These advantages illustrate how technology, when appropriately utilized, can significantly enhance both the quality and accessibility of education.

### **1.1 The English UPB Tutors' Experiences in Adapting Educational Technology Usage Change**

The experiences of the participants in this study reflect the extent to which they utilized technology in their teaching practices and their emotional

responses toward the introduction of new technological tools. These experiences illustrate how participants perceived technological innovations as either facilitating or complicating their instructional processes, depending on their familiarity, confidence, and adaptability in using such technologies.

#### 1) Participant 1

The participant has accumulated one year of teaching experience at UPB, complemented by an additional two years of instructional experience at another higher education institution. This combination of teaching roles has provided the participant with broader exposure to diverse academic environments and pedagogical practices.

*“Apakah kamu pernah melaksanakan kelas dengan menggunakan teknologi secara online ataupun offline?”* Is The first question to participant to knowing of their experiences. The participant answered *“ saya jarang menggunakan teknologi dalam praktek mengajar karena persiapannya yang rumit, tetapi audio atau video saya sering gunakan untuk latihan listening, juga menggunakan video yang relevan di zaman sekarang membuat murid jadi lebih excited dan saya merasa sedikit senang”*

participant stated that he seldom utilized technology because of his anxious due to the perceived complexity of preparation and implementation. However, he acknowledged that audio and video

technologies were frequently employed, particularly in teaching listening skills, as these tools were relatively easier to prepare and integrate into lessons. Moreover, he noted that the use of such media tended to increase student engagement and enthusiasm during the learning process.

## 2) Participant 2

The participants have one year of teaching experience at UPB. In addition to their experience at the university level, they have also spent two to three years teaching in school settings as well as providing private lessons. This range of instructional experiences has enabled the participants to engage with learners across multiple educational contexts and to develop a broader understanding of pedagogical practices.

Participant answered the first question “ Did you have teaching experienced in using technology online or offline?” the participant answered “I often using quizziz for assessment test because its make easier to input students score” Participants have also tried other application technologies, such as Kahoot, but found it difficult to implement due to their unfamiliarity with the system, which differs from Quizziz “I also tried to learn Kahoot but I was confused because the layout was different and it was still difficult to use it”.

The second participant indicated that he frequently utilized and explored various forms of technology in his teaching practices such as Quizziz. He expressed a sense of satisfaction “When using Quizziz, I am very satisfied because it makes it easier for me to input assessments. “Participant also had enthusiasm when discovering new technological tools and successfully integrating them into his instructional activities also often try to learn new technologies that I usually find on social media and when I try them out and if they work, I am very satisfied “This positive experience motivated him to continue experimenting with different media to enhance the effectiveness and engagement of his teaching.

### 3) Participant 3

The participant had one year of teaching experience at UPB and several years in schools. Despite having extensive experience teaching in schools, the participant did not use technology very often when teaching at UPB.

The first question to participant is “ *apakah kamu pernah mengajar/melaksanakan kelas menggunakan teknologi online atau offline?*” the participants answered “ *ya, saya pernah menggunakan voice note, quizziz dan speaker audio*” Even though the participant have experience using these technology, participants still rarely use technology when teaching because it requires more preparation and adequate facilities

*“tetapi saya cukup jarang dalam menggunakan teknologi karena persiapan yang banyak juga fasilitas dan device yang kurang mumpuni”.*

The third participant explained that his experience in using technology was relatively limited, as he found the process quite challenging. He noted that setting up technological tools required considerable time and effort, particularly when working with new media, in addition when using technology in the form of applications, you need a device that is capable of using the application. Consequently, he often needed to learn from the beginning each time he adopted unfamiliar technological resources, which made the integration process more time-consuming and demanding.

#### 4) Participant 4

Participants has been three to four years of teaching experience at UPB and have had several years of teaching experience outside UPB. This significant experience makes participants creative in using technology in teaching at UPB.

This participant often to used technology in teaching *“Cukup sering, saya sering menggunakan canva, Quizziz, Socialgamebox, Wordwall, Kahoot, Genially”*

The fourth participant stated that she frequently utilized various forms of technological media, both those provided by UPB and those introduced during her academic studies, as well as new technologies she had not previously used. She expressed great enthusiasm for exploring innovative teaching methods, particularly those involving game-based learning platforms available on websites or mobile applications. According to her, although the preparation process could sometimes be complex and time-consuming *“terkadang saya bingung dengan step-step untuk menerapkannya di kelas dan fasilitas harus memadai itu jadi salah satu kesulitan dalam menggunakan teknologi dalam mengajar”* although the participant had struggle, the actual implementation in the classroom was relatively easy and enjoyable, making the teaching and learning experience more engaging for both teacher and students.

Furthermore, artificial intelligence (AI) technology has contributed to simplifying the preparation of learning materials, providing teachers with a greater degree of efficiency and convenience in instructional planning. AI-based tools assist educators in generating, organizing, and customizing teaching resources in a shorter amount of time, thereby reducing the workload associated with manual preparation. This technology proves particularly valuable in situations where time constraints or the unavailability of traditional preparation methods limit teachers' ability to



design comprehensive lessons. Consequently, the integration of AI not only enhances productivity but also enables teachers to focus more on pedagogical quality and student engagement.

#### 5) Participant 5

This participant has had approximately two years of teaching at UPB, but the participant also has a lot of experience teaching in the school environment. Despite having a lot of experience teaching at school, the participant rarely uses technology because of school rules that limit the use of technology.

This participant answered the question of “ Did you have experience in teaching using technology?” with interesting answer “ *Saya sangat jarang menggunakan teknologi di kelas karena waktu dan menggunakannya membutuhkan persiapan dan fasilitas yang mumpuni, tapi saya sering menggunakan prompt AI dalam mencari ide lesson plan*” This shows that educational technology does not have to be applied in the classroom but in a wider scope.

The fifth participant explained that he only occasionally incorporated technology into his teaching practices at UPB, primarily due to limited time to learn and explore new technological tools. He noted that when attempting to use technology-based resources, such as online educational games, he

encountered difficulties because he was not yet familiar with the systems and their functions. Nevertheless, he continued to seek out and stay informed about the latest developments in educational technology as a means of maintaining professional growth and ensuring that his teaching remained engaging and up-to-date.

Based on the data collected, it can be concluded that the participants' experiences exhibited notable variation. These differences were shaped by the extent of their engagement with technological tools and by their affective responses to technological integration, including varying degrees of anxiety, enthusiasm, and satisfaction. Such emotional and behavioral factors played a significant role in influencing how participants perceived and navigated technological change within their teaching practices.

## **1.2 English UPB Tutors' Challenges in Using Technology**

The challenges encountered by participants encompass a range of difficulties related to the use of technology, including both technical issues and obstacles associated with learning or experimenting with new technological tools. These challenges reflect the participants' varying levels of digital proficiency and their ongoing efforts to navigate the complexities of integrating emerging technologies into their teaching practices.

### **1) Participant 1**

The questions to find challenges “ Have you ever had difficulty using that technology? “ in Indonesian “ *apa kesulitan kamu dalam menggunakan teknologi itu? ” “Kesulitannya itu lambat dalam mempersiapkan dan terkadang speaker tidak bisa terkoneksi ke device, saat mengajar secara online juga terkadang sinyal internet jadi tantangan”* answered by participant.

The participants reported several challenges associated with the integration of technology into their teaching practices. One of the most frequently mentioned issues was the instability of internet connectivity during online classes conducted through platforms such as Zoom and Google Meet, which often necessitated system resets and interrupted the flow of instruction. To mitigate this problem, some teachers resorted to alternative communication platforms, such as WhatsApp, which require less bandwidth and are therefore more reliable under weak network conditions.

Participants also experienced technical difficulties when using audio equipment and projector screens, particularly instances where audio playback was disrupted due to poor internet signals. A commonly adopted solution involved downloading audio or video materials in advance, ensuring smoother delivery of lessons without reliance on real-time internet access. Additionally, several participants reported challenges related to

malfunctioning projector equipment, which occasionally rendered them unusable during class sessions. In such cases, teachers employed compensatory strategies, such as sharing presentation materials through WhatsApp, enabling students to access the content individually on their personal devices. These adaptive measures demonstrate the teachers' ability to respond flexibly to technical constraints while maintaining the continuity and effectiveness of instruction.

## 2) Participant 2

Question “ Tantangan dan kesulitan yang pernah kamu alami? ” “ Saat pakai Quizziz itu bisa error terkadang bingung dan panik cari solusinya dan kalau pakai Kahoot belum terlalu familiar”

Participants also encountered several challenges when utilizing game-based learning technologies such as Quizziz, Kahoot, and similar interactive platforms. One commonly reported issue involved incorrect system settings, such as instances where students could view the correct answers immediately after responding to a question. This unexpected outcome often caused temporary confusion during class activities. To address this problem, teachers typically chose to recreate or adjust the quiz settings, despite the time constraints associated with lesson preparation.

Another recurrent challenge related to unstable or slow internet connections experienced by students while participating in these online games. Such connectivity issues frequently resulted in delayed score input or disrupted participation, thereby affecting the smooth flow of classroom activities. As a practical solution, teachers occasionally provided additional internet access through Wi-Fi networks or personal mobile hotspots, ensuring that all students could engage effectively in the learning process. These adaptive strategies highlight the teachers' resourcefulness and commitment to maintaining interactive and technologically enhanced learning environments despite technical limitations.

### 3) Participant 3

Questions “*Apa tantangan yang kamu hadapi saat menggunakan Voice Note atau Quizziz?*” Participant answered “*Saat pakai Voice Note sinyal jadi tantangan karena secara online tidak semua murid punya koneksi internet yang baik kalau Quizziz mempersiapkannya itu perlu waktu*” This shows that personal time and facilities such as the internet play an important role.

The challenges associated with the use of technology in the classroom are diverse and often related to the uneven distribution of technological facilities across classes. For instance, while some classrooms are equipped

with projector screens and supporting devices, others lack such essential equipment. Even when projectors are available, teachers sometimes encounter incomplete or missing connection cables, which hinders the integration of multimedia resources during instruction. To overcome these obstacles, teachers often adopt practical solutions such as borrowing cables or projector screens from colleagues who possess the necessary equipment or bringing their own devices and accessories to ensure the smooth implementation of technology in their lessons. These efforts demonstrate teachers' adaptability and problem-solving skills in addressing infrastructural limitations within their teaching environment.

Another notable challenge involves the use of online game-based learning platforms such as Quizziz and Kahoot. The primary difficulty arises from teachers' limited familiarity with the interface and operational features of these applications, which often necessitates learning from the beginning. In addition, the effective implementation of such platforms in the classroom depends on stable internet connectivity and the availability of compatible student devices, both of which can hinder smooth execution when inadequate. To address these challenges, teachers frequently engage in self-directed learning, such as watching video tutorials on YouTube or other social media platforms, to enhance the understanding.

#### 4) Participant 4

Question “*Apa kesulitan menggunakan atau menerapkan teknologi aplikasi itu dalam mengajar?*” Participant answered “*Bingung step-step atau langkah-langkah dalam menerapkannya, laptop atau device yang kurang mumpuni dan fasilitas di dalam kelas kelas yang kurang*” “*Apakah ada kesulitan dalam mempersiapkannya*” “*Ya, saat menggunakan teknologi berbasis game sangat butuh waktu untuk mempersiapkan dan akan mengambil waktu lagi saat menjelaskan bagaimana cara kerja gamenya ke murid*”

This shows that when trying new technology, participants have to face confusion in finding ideas on how to apply technology in the classroom.

One of the key challenges identified by participants was the difficulty in allocating sufficient time to prepare technological media, particularly when faced with limited preparation time. This constraint often affected the quality and readiness of digital learning materials prior to classroom implementation. Another significant challenge emerged during class sessions, where unstable internet connections occasionally disrupted the learning process, causing confusion and delays. To address such issues, participants emphasized the importance of anticipating potential technical problems and preparing contingency plans in advance. Consequently, teachers were required to exert additional effort in designing alternative learning methods or backup instructional materials to ensure the continuity

and effectiveness of the teaching and learning process, even under unpredictable technical conditions.

#### 5) Participant 5

Another challenge experienced by participants was the fear of failure when implementing technology in the classroom, primarily due to limited familiarity with its operation. This apprehension was particularly evident when using Quizziz or other online game-based learning platforms, where technical errors or system failures could disrupt the flow of instruction. As a result, some teachers preferred to rely on more familiar and reliable technologies, such as audio speakers or projector screens, to minimize the risk of technical difficulties during teaching. This cautious approach reflects teachers' desire to maintain classroom stability and ensure smooth lesson delivery, even if it limits opportunities for more innovative technology integration.

Based on the data obtained, participants encountered substantial challenges related to technical issues, particularly in terms of anticipating potential problems and managing technical difficulties during critical moments of instruction. These challenges highlight the need for improved preparedness and problem-solving strategies when integrating technology into classroom practice.



### **1.3 The English UPB Tutors' Effort in Adapting Educational Technological Change**

In responding to technological changes, all participants demonstrated similar efforts, which can be categorized into several key areas. These efforts reflect their adapting to new digital tools and integrating them into their teaching practices in order to enhance instructional effectiveness and student engagement.

The findings of this study indicate that participants employ a variety of strategies to cope with and adapt to technological change in their teaching practices. Overall, they demonstrate a proactive attitude toward continuous learning and professional development in response to technological change

Collectively, these findings suggest that UPB teachers exhibit resilience and adaptability in managing technological change, combining formal learning opportunities with informal, self-initiated efforts to enhance their technological competence.

#### **a. Self-taught**

Participants stated that they consistently strive to learn about the latest technological media to enhance their teaching practices. However, their experiences and outcomes vary. Some participants reported

success in understanding and applying new technologies, expressing enjoyment and satisfaction in using them effectively. In contrast, others found certain technologies difficult to comprehend and described the learning process as complex or challenging. These differing experiences highlight the diversity of teachers' technological adaptability and their varying levels of digital competence.

The most common method through which participants learn about educational technology is by watching instructional tutorials on digital platforms such as YouTube, TikTok, and Instagram, which provide accessible and practical guidance for integrating technology into their teaching practices.

#### **b. Teacher training program**

Participation in teacher training programs that introduce the latest technologies conducted through both formal seminars and online workshops represents one of the key efforts made by participants to adapt to technological changes. Such training opportunities enable teachers to enhance their digital competence, stay informed about emerging educational tools, and develop practical strategies for integrating technology effectively into their teaching practices.

**c. Sharing among UPB teachers**

Sharing knowledge about new technologies is an effort participants make to adapt to technology. It shows how they learn about new technologies, understand them, and can then put them into practice in class. Sharing with fellow participants has the advantage of learning directly from someone who is more knowledgeable.

**d. Attentive to social media**

To remain up-to-date with emerging technologies and avoid falling behind, the participants reported that they actively monitor and engage with educational content on social media platforms related to technology-enhanced teaching and learning.

All participants provided similar responses regarding their efforts to remain informed about emerging technologies in education. They consistently reported monitoring social media platforms to identify and explore technological innovations that could be effectively integrated into teaching and learning practices.

Base on the data obtained, Participants demonstrate significant efforts to adapt to technological changes in teaching practices, characterized by a proactive approach to continuous learning. They employ various strategies,

including self-directed learning via digital tutorials, engaging in teacher training programs, and sharing knowledge amongst colleagues. Most participants actively monitor social media for updates on educational technologies, highlighting a collective resilience and adaptability in enhancing their instructional effectiveness and student engagement.

## **B. Discussion**

Based on findings of this study, it can be concluded that participants' experiences and challenges in using technology are influenced by several interrelated factors, included technological stress, limited availability of facilities, insufficient institutional support, and a lack of familiarity or prior knowledge regarding technological tools. These factors collectively shape the extent to which participants are able to integrate technology effectively into their teaching practices.

In the findings of this study, it can be inferred that participants who frequently integrated technology into their teaching are those who engage in autodidactic or independent learning, supplementing but not relying solely on formal training. This suggests that formal training alone is insufficient to fully develop teachers' confidence in adopting new technologies.

To effectively address future technological advancements, greater and more comprehensive efforts will be required. Formal teacher training programs

must be strengthened not only by providing theoretical knowledge but also by offering practical guidance on managing technical difficulties, which are often the source of teachers' anxiety when using technology. Enhancing both the depth and practicality of such training will be essential in supporting teachers' readiness and confidence in navigating ongoing technological change.

In the first research questions of “How are teachers' experiences in adapt with technological changes?” have significant results with the theory that teachers can experience feelings of stress or anxiety in using technology (Batanero et al., 2021). In theory, Teachers face several challenges when using technology in their teaching, including limited access to devices, not enough time to prepare, and low confidence or skills in using technological tools (Rofi'I et al., 2023)

In second research question of “What efforts do the English Teachers in adapting Educational Technological Changes?” based on findings this is very much in accordance with the theory as Many educational institutions now provide professional development programs focused on digital teaching tools. By taking part in these structured training sessions, teachers can improve their ability to use technology effectively in the classroom. because the results of each interview found that every participant who frequently used technology and those who rarely used technology had always participated in structural teaching training from formal to seminars.

Based on the findings of this study, formal training in educational technology alone is insufficient to fully support teachers' adaptation to future technological developments. Effective integration requires not only structured instruction but also teachers' intrinsic motivation to engage in continuous learning and to adjust proactively to emerging educational technologies.

The interview findings from the five participants were highly relevant and aligned with Tondeur (2016) theory, which emphasizes that teachers can adapt to educational technology through participation in training programs, self-directed learning, knowledge sharing within professional communities, and maintaining awareness of emerging technological media.