CHAPTER I

INTRODUCTION

1.1 Background of The Study

Individuals with visual impairments are those who experience partial or complete limitations of their visual function, resulting in the inability to process visual information optimally. According to the World Health Organization (WHO), individuals with visual impairments experience significant vision loss that cannot be corrected through medical or surgical interventions. This condition affects their ability to perform tasks that require visual input, particularly in educational environments. The term "visual impairment" includes a spectrum of conditions, ranging from low vision where individuals can still perform tasks with assistive devices to total blindness, in which no functional vision remains. These conditions can be caused by various factors, generally categorized into internal and external causes. Internal factors include genetic predispositions and developmental issues during pregnancy, while external factors may arise from conditions such as cataracts, glaucoma, or other health complications that lead to blindness. Blindness is not merely the absence of vision; it requires adaptation in communication strategies, mobility, and learning processes to support social participation and independence.

Every individual has unique strengths and limitations. These limitations can be addressed by maximizing and showcasing their potential. For individuals who are blind, limited visual perception often becomes a challenge in education. Gargiulo (2012) defines blindness as a condition in which a person experiences significant visual impairment even after corrective efforts using optical devices. Similarly, Acheampong

(2019) describes blindness as a condition marked by a severe inability or limitation in accessing information through visual means. Therefore, it becomes the responsibility of both teachers and the government to give special attention to blind students during the learning process. One way to address this issue is by providing effective learning media tailored to their needs.

In the educational process, appropriate learning media play a vital role in supporting blind students in bridging the gap between themselves and their peers without physical limitations. These learning tools must be designed to accommodate the specific conditions and needs of visually impaired students. Developing innovative learning media tailored to the needs of blind students is essential to ensure equal educational opportunities and enhance their learning experiences (Samathayakul & Thamaduangsri, 2022). Thus, it is the duty of educators to create learning media that are innovative, creative, and effective in optimizing the educational development of students with visual impairments.

Learning media are crucial educational resources because they can accommodate various learning styles, interests, intelligence levels, sensory limitations, physical disabilities, as well as constraints related to distance, time, and others. According to Susilana & Pribadi (2021), learning media play an important role, especially for teachers, as they serve as the primary tools for delivering content to students, thereby ensuring the achievement of educational goals. Research Nur Cahyono et al. (2021) shows that the use of learning media in the teaching and learning process can stimulate new interests and motivation, encourage learning activities, and even have psychological impacts on students. Similarly, Nasution et al. (2022) asserts that learning media are highly important for both teachers and students as they facilitate a more effective and efficient learning process.

For visually impaired students, learning media offer significant benefits. They can serve as a solution to various challenges encountered during the learning process. The use of effective learning media can improve students' academic performance, foster positive relationships between teachers and students, and reduce classroom boredom (Samathayakul & Thamaduangsri, 2022). Along with technological advancements, it is essential for educators to enhance their skills in mastering various forms of learning media to meet the demands of modern education (Samathayakul & Thamaduangsri, 2022). The needs of blind students must be addressed through accessible and efficient learning media. These media should be designed to accommodate their dominant sensory strength, hearing.

One medium that aligns well with these needs is the audiobook. Originally designed for individuals with visual impairments, audiobooks have now gained popularity as digital learning tools (Razani & Via Lesmana, 2024). Audiobooks have shown promising results in improving reading comprehension and language skills among English as a Foreign Language (EFL) learners. Visually impaired students can learn effectively through audio-based media that emphasize hearing, which they can rely on due to their enhanced auditory perception (Ching-Shyang CHANG, 2011). Studies have shown that audiobooks help students read independently, improve comprehension, and develop reading and language competencies (Riswanda Imawan, 2019). Audiobooks can be customized to meet the specific needs of learners. Since visually impaired students cannot depend on visual cues in the learning process, they tend to rely on auditory learning styles and strategies (Guha, 2020a). Therefore, educators must be responsive by providing audio tools that enable students to utilize their remaining senses to access information, thereby facilitating an effective learning process.

Based on observations and interviews conducted at SLB Negeri 1 Tabanan, it was found that the English learning process still heavily relies on Braille books and YouTube videos. However, these media are not entirely effective: Braille books require specific skills that not all students possess, and YouTube videos are mostly visual and do not fully support the needs of blind learners. Although Braille and YouTube videos assist in the learning process, the repetitive use of the same media often causes students to become bored, leading to a decline in learning motivation. The lack of variety in learning media limits student engagement and negatively impacts their overall learning experience. Teachers also reported difficulties in delivering English material using visually oriented approaches.

The teacher also emphasized the importance of accessible learning tools that are not visually reliant and highlighted the diversity of students' learning needs and comprehension levels. He recommended short, engaging audio content with everyday vocabulary and familiar contexts. These findings provided crucial insights and served as the foundation for designing the audiobook content that is inclusive, motivating, and responsive to the real challenges and preferences of the students.

To address these challenges, the researcher developed a digital audiobook as an English learning medium specifically designed for 11th-grade blind students at SLB Negeri 1 Tabanan. The development is based on the first-semester learning objectives outlined in the Kurikulum Merdeka. The product is packaged using Heyzine Flipbook, a digital platform that allows the integration of audio within an interactive book format. Heyzine was chosen for its keyboard navigation support, ease of access, content editing features, and compatibility with accessibility tools such as TalkBack, making it friendly for visually impaired users. These features make it superior to other platforms like Story

Jumper, Issuu, or Canva, which do not fully support accessibility for students with disabilities.

In addition to serving as an academic product, this research is expected to make a meaningful contribution to SLB Negeri 1 Tabanan in promoting inclusive education. UNESCO (2020) emphasizes that inclusive education is not only about the physical presence of students with special needs in classrooms but also about providing media and learning methods tailored to their characteristics. Therefore, the development of this audiobook serves as a concrete step toward supporting equal access and quality English education for students with visual impairments.

1.2 Problem Identification

Several previous studies highlighted the challenges faced by visually impaired students (VIS) in the learning process, particularly in English language learning. These challenges include limited access to appropriate learning resource (Febrian Gunadi & Binawan, 2023), insufficient training for special education teachers (Aftab et al., 2022) and the need for teachers to convert instructional media into audio formats (Zahra et al., 2022). In this context, VIS require instructional approaches that align with their sensory strengths, particularly their auditory abilities. Therefore, audio-based learning materials are considered highly appropriate for supporting their comprehension, as they can deliver information without relying on visual input (Wahyuni & Hijjatul, 2020).

In the current digital era, smartphones have become essential learning tools for VIS. Features such as screen readers and voice search functions enable them to access materials more independently and flexibly. At SLB Negeri 1 Tabanan, for example, teachers have utilized platforms such as educational YouTube content, WhatsApp Groups, and Quizizz

to support learning. However, the use of these media has not been entirely effective, as they are not specifically designed to address the learning needs of VIS, particularly in the context of English language instruction.

Observations indicate that VIS at SLB Negeri 1 Tabanan require English learning materials that are specifically tailored to their needs in both content and delivery format. Audiobooks represent an ideal solution, as they allow students to hear proper intonation, stress, and language nuances directly. Additionally, audiobooks offer flexibility in scheduling and promote autonomous learning. Students report feeling more motivated when using audiobooks, as these resources simplify the learning process (Keguruan et al., 2019). Audiobooks also allow learners to control the pace of their study and accommodate their auditory learning styles, making the learning experience significantly more accessible (Guha, 2020).

Previous studies have demonstrated the effectiveness of audio media in improving the comprehension of students with special needs. For instance, Saputra et al. (2022) developed audio-based materials using the ADDIE model and observed improvements in accessibility and understanding. Similarly, Sholeha et al. (2024) found that audiobooks enhanced retention among students with intellectual disabilities. However, most of these studies employed conventional linear development models such as ADDIE, which are less adaptive to changes and feedback during the development process (Dewi et al., 2024).

To address these issues, the present study proposes the development of English learning materials in the form of audiobooks, specifically designed for eleventh-grade visually impaired students at SLB Negeri 1 Tabanan. This study adopted the Successive Approximation Model (SAM) Two-Phase, which is more flexible and iterative, allowing continuous adjustments based on feedback (M. Allen & Sites, 2012). The novelty of this study lies in the application of SAM, a model rarely used in the development of

instructional media for VIS as well as in the integration of interactive features such as listening comprehension exercises and audio-based feedback.

Moreover, the developed materials will be evaluated through expert judgment based on Tomlinson's (2011) principles of effective language learning materials. As such, this study aims not only to provide English learning materials that are more accessible and effective for VIS but also to contribute to a systematic approach to developing inclusive instructional media in the Indonesian educational context.

1.3 Limitation of The Study

This study is limited to the development of English learning materials in the form of an audiobook, specifically designed for 11th-grade visually impaired students at SLB Negeri 1 Tabanan during the first semester. The focus is on content development based on students' learning needs and expert evaluation using Tomlinson's (2011) criteria. Furthermore, the developed audiobook functions optimally when accessed through mobile devices (smartphones). When accessed using a laptop or desktop computer, the media may experience bugs or lags that disrupt the learning process. Therefore, this limitation should be considered in the implementation of the product.

1.4 Research Question

Based on the background of the study and the identification problems, research questions are formulated as follows:

1. What challenges do English teachers and visually impaired students at SLB Negeri 1 Tabanan perceive regarding the potential use of audiobooks or learning English before they are introduced?
2. How are the English learning materials developed in the form of an audiobook to meet the needs of visually impaired students?
3. How is the quality of the developed English learning materials in the form of an audiobook for visually impaired students?

1.5 Research Objectives

Based on the research questions above, the objectives are formulated as follows:

1. To explore the challenges perceived by English teachers and visually impaired students at SLB Negeri 1 Tabanan regarding the potential use of audiobooks for learning English before their introduction.
2. To develop English learning materials in the form of an audiobook that are specifically designed to meet the learning needs of 11th-grade visually impaired students at SLB Negeri 1 Tabanan.
3. To evaluate the quality of the developed English learning materials in the form of an audiobook for visually impaired students.

1.6 Research Significance

1.6.1 Theoretical Significance

This research contributes to the development of theory in the field of English language learning material design and development for visually impaired students, particularly in the context of inclusive education. The developed materials refer to the criteria of good language learning materials as proposed by Tomlinson (2011), which emphasize the importance of relevance, engagement, applicability, and meaningfulness for learners. This study also adds a new perspective by integrating audiobooks as the medium of material delivery through the Heyzine Flipbook platform, thereby enriching the literature on digital media adaptation for special needs education. The results of this research should serve as a reference for the development of inclusive, effective, and sensory-responsive audio-based English learning theories and practices for visually impaired students.

1.6.2 Practical Significance

1. Teacher

   This research provides an alternative, innovative, and accessible learning medium to support the English learning process for visually impaired students. The developed audiobook can assist teachers in delivering materials in a more inclusive manner and reduce reliance on visual methods. Teachers may also use the findings of this study as a reference in developing other materials tailored to the needs of students with special needs.

2. Student

The audiobook, specifically designed based on the needs of visually impaired students, offers a more enjoyable, interactive, and accessible learning experience. Audio-based materials leverage students' auditory sensory strengths, enabling them to learn independently, enhance their understanding, and access the materials anytime and anywhere.

3. Researcher

This study could serve as an initial reference for other researchers interested in developing inclusive audio-based learning media. The design and approach used in this research may provide a foundation for future studies, whether in terms of material development, media effectiveness evaluation, or the integration of other technologies in education for students with special needs.