

Designing and Developing Audiobooks That Suit the Needs of Tenth-Grade, Second-Semester Visually Impaired Students at SLB N 1 Tabanan

Ni Wayan Septia Jayani^{1}, I Putu Indra Kusuma¹, Ni Putu Astiti Pratiwi¹, I Ketut Trika Adi Ana¹*

¹Universitas Pendidikan Ganesha
septia.jayani@undiksha.ac.id*

ABSTRACT

This study addresses the limited availability of structured and accessible English learning materials for students with visual impairments (VIS), particularly in the Indonesian inclusive education context. The study focuses on designing and developing English audiobooks that suit the learning needs of tenth grade second semester visually impaired students at SLB Negeri 1 Tabanan. The objective of the study was to design and develop audiobooks that suit the needs of visually impaired students (VIS) in learning English. Employing a qualitative research design, the study adopted the Successive Approximation Model (SAM), involving iterative stages of project planning, design, prototyping, expert evaluation, and revision. Data were collected through classroom observation, interviews, reflective journaling, and expert judgment. The findings indicate that the developed audiobooks successfully enhanced material clarity, accessibility, and learner engagement, featuring bilingual vocabulary support, clear narration, consistent unit structure, pronunciation modeling, and simplified listening tasks. Expert validation confirmed the suitability of the content for visually impaired learners. In conclusion, the study demonstrates that well-designed audiobooks can function as core instructional media that promote independent learning and inclusive EFL instruction. Thus, teachers can integrate the audiobooks into daily instruction to supplement limited teaching resources, while students can use them for repeated practice beyond the classroom.

ARTICLE INFO

Keywords:

Audiobook;
SLB N 1 Tabanan;
Teaching English;
Visual Impairment Student

Article History:

Received: 17 December 2025
Revised: 7 January 2026
Accepted: 10 January 2026
Published: 11 January 2026

How to Cite in APA Style:

Jayani, N. W. S., Kusuma, I. P. I., Pratiwi, N. P. A., & Ana, I. K. T. A. (2026). Designing and Developing Audiobooks That Suit the Needs of Tenth-Grade, Second-Semester Visually Impaired Students at SLB N 1 Tabanan. *Lexeme : Journal of Linguistics and Applied Linguistics*, 8(1), 61–68.
<https://doi.org/10.32493/ljal.v8i1.56000>

This is an open access article under [CC-BY-NC 4.0](#) license.



INTRODUCTION

According to Perrault et al. (2023), education for students with special needs requires a differentiated approach that accommodates their unique abilities and limitations. Due to their reliance on non-visual communication modes, students with visual impairments (VIS) often face greater barriers in accessing learning resources (Perrault et al., 2023). In particular, learning English as a Foreign Language (EFL) poses significant challenges for VIS, because conventional teaching materials are largely text- and image-based (Fadlilah, 2022). Previous research shows that these students may struggle with low motivation, limited persistence in completing academic tasks, and difficulty in setting long-term learning goals (Gkora & Karabatzaki, 2023; Stahopoulou

& Siskou, 2023). Thus, these challenges can hinder their language proficiency and overall academic achievement without appropriate intervention.

According to Fadlilah (2022), the integration of assistive technology has been recognized as one of the most effective strategies to bridge the gap between ideal and actual learning conditions for students with disabilities. Information through various media, including Braille books, tactile models, voice software, and audiobooks can be accessed by VIS (Guha, 2020; Fadlilah, 2022). According to Fansury et al. (2019), audiobooks have attracted attention because they provide easily accessible, portable, and flexible learning opportunities that meet the needs of auditory learning among these media, where audiobooks allow learners to review content at their own pace, encourage independent learning and reduce dependence on teachers or Braille readers. Also, its features emphasize equality of access and opportunity for all learners, which is in line with the principles of inclusive education (Bryant et al., 2019).

However, audiobooks also have weaknesses, such as the use of audiobooks in English learning for VIS in Indonesia is still underdeveloped and lacks a systematic learning design. This can be seen from previous research, where their research shows that teachers often rely on non-specialized media such as YouTube videos, WhatsApp voice messages, or simple quizzes, which are not fully adapted to the needs of VIS (Saputra et al., 2022; Gunadi & Binawan, 2023; Zahra et al., 2022). According to Kim (2021), empirical evidence regarding its effectiveness in inclusive schools in Indonesia is still limited, although international studies highlight the benefits of audiobooks in improving listening and comprehension skills. Therefore, this indicates a clear research gap, one of which is the lack of structured and validated English audiobooks in the Indonesian educational context specifically designed for VIS.

Audiobooks support the development of listening and speaking skills. According to Nabiyevev (2022), listening comprehension provides the foundation for accurate pronunciation, vocabulary acquisition, and syntactic awareness. On the other hand, speaking allows learners to express ideas, engage in discussions, and demonstrate proficiency, so speaking is considered the most essential communication skill in second language learning (Rao, 2019). According to Vandergrift (2007), audiobooks promote holistic language development among VIS because they can enhance receptive and productive skills with expressive narratives and authentic language input. Thus, the novelty of this research lies in its focus on audiobook development that emphasizes iterative design, prototyping, and continuous evaluation for VIS using Successive Approximation Model (SAM) (Allen, 2012). Also, the research gap is the lack of structured and validated English audiobooks in the Indonesian educational context specifically designed for VIS.

According to Dewi et al. (2024), SAM is very suitable for inclusive education because it allows greater flexibility and adaptation to students' needs. This research provides an innovative and contextually relevant contribution to inclusive EFL pedagogy in Indonesia by integrating instructional design principles, expert validation, and real-life experiences of tenth grade second semester VIS at SLB N 1 Tabanan. Also, this study seeks to fill the existing gaps by designing, developing, and evaluating audiobooks for VIS, with the aim of improving accessibility, motivation, and learning outcomes in inclusive educational environments. Thus, how are the audiobooks that meet the needs of Visual Impairment Students in English language education developed is the research question of this study.

METHOD

This study is a qualitative study that used a Successive Approximation Model (SAM) by Allen (2012), which is Iterative Design and Development Phase that covers project planning, design, prototyping, and expert evaluation to develop English audiobook materials tailored for visually impaired students. In the design stage, an initial audiobook prototype is planned based on the evaluation results, including determining learning objectives, selecting an appropriate narrative style, compiling the script, and determining the delivery method, such as narration only or audio-based Q&A. In the evaluation stage, researchers conducted a needs analysis through

observation and interviews to determine the objectives of the audiobook.

This research was conducted at SLB Negeri 1 Tabanan, Bali, Indonesia, where the school serves students with various disabilities, including visual impairments. The subjects of this study were two experts in English language teaching and learning materials development, who were responsible for evaluating the quality and pedagogical value of audiobooks. Tenth grade second semester students at SLB Negeri 1 Tabanan is also the subjects. Meanwhile, the object of this research is the development of English audio books specifically designed for VIS students in grade ten second semester.

Furthermore, to ensure the reliability of the findings, multiple data collection techniques were used. Observation, interviews, journaling, and expert judgment were used in this study as data collection methods. Observations using field notes were conducted in the classroom to record the learning environment and teaching practices. Then, interviews using an interview guide instrument adapted from Guha (2020) were conducted with students and teachers. In addition, a reflective journal was maintained throughout the study to document decisions and progress during the audiobook development.

FINDINGS AND DISCUSSION

Findings

The results of this study describe the process and outcomes of developing English audiobook materials designed to meet the learning needs of visually impaired students. The findings are organized according to the stages of development, beginning with project planning and content selection, followed by material design, expert revision, and final audiobook production.

Table 1. The Summary of Findings

Stages	Title
Project Planning	Focused on identifying appropriate content topics that align with the curriculum and the real communicative needs of tenth-grade visually impaired students, which is Job or Occupation, Exposition Text, and Recount Text.
Additional Design	Developed a consistent unit structure to support independent and accessible learning.
Design	The first prototype of the audiobook was produced based on the established unit framework.
Build	The approved content was converted into an interactive audiobook using the Heyzine Flipbook platform.

Based on the Table 1 above, the project planning stage focused on identifying appropriate content topics that align with the curriculum and the real communicative needs of tenth-grade visually impaired students. Three main topics, which is Job or Occupation, Exposition Text, and Recount Text were selected based on the English lesson plans from the Merdeka Mengajar platform, the Kurikulum Merdeka framework for special needs schools, teacher-developed assessments, and interview data. These topics were chosen because they reflect everyday communication contexts and support functional language use, such as asking for help, offering suggestions, and expressing opinions. The alignment between curriculum documents, teacher practices, and student needs indicates that the selected topics were relevant and appropriate for the target learners.

Following topic selection, the researcher developed a consistent unit structure to support independent and accessible learning. Each audiobook unit was designed using the same pattern, consisting of vocabulary introduction with Indonesian translations, useful expressions, listening dialogues, listening comprehension questions, and guided speaking practice. This uniform structure was intentionally applied to help visually impaired students anticipate learning activities and navigate the material more easily. Interview findings and researcher journal entries revealed

that students preferred short, clearly organized, bilingual, and repeatable content. These preferences directly informed the design of the unit structure and content presentation.

In the design stage, the first prototype of the audiobook was produced based on the established unit framework. Although each unit addressed different communicative functions, all units followed the same instructional sequence to maintain consistency. The prototype emphasized listening and speaking skills, with careful attention to clarity, simplicity, and accessibility. The preliminary version of the audiobook revealed several areas requiring improvement, particularly in vocabulary depth, pronunciation support, and task clarity. To address these issues, the prototype underwent three stages of expert-guided revision. The first revision focused on expanding the vocabulary section. Initially, each unit included only five vocabulary items without translations or contextual support, which limited students' comprehension. Based on expert feedback, the vocabulary list was expanded to at least ten items per unit, each accompanied by Indonesian translations. This revision significantly improved accessibility and reduced students' dependence on external explanations.

The second revision targeted the speaking activities. In the initial draft, students were expected to respond to speaking prompts without a clear pronunciation model. Experts noted that this posed difficulties for visually impaired learners who rely heavily on auditory input. As a result, "Repeat after me" cues were added to the speaking sections. This change provided explicit pronunciation guidance and allowed students to imitate the model, increasing their confidence and participation in speaking practice. The third revision focused on the listening quiz section. Early versions of the material combined multiple question types within a single unit, which created confusion and increased cognitive load. To improve clarity, each unit was revised to include only one type of listening quiz, such as true/false or multiple-choice questions. This simplification helped students focus on comprehension rather than task instructions while still maintaining variation across different units.

After all revisions were completed and validated by experts, the materials were finalized and moved into the build stage. In this phase, the approved content was converted into an interactive audiobook using the Heyzine Flipbook platform. Heyzine was selected because it supports integrated audio narration, accessible navigation features compatible with screen readers, and flexible display across devices. Each unit was uploaded as a structured section that guided learners from vocabulary to listening and speaking activities in a coherent sequence.

The audio production process emphasized clear articulation, expressive intonation, slowed pronunciation, and smooth transitions between sections. Additional auditory cues, such as brief transition sentences, were included to help learners follow the flow of the material. Light background sound effects were used selectively to maintain engagement without causing distraction. Visual elements were designed using Canva with high contrast, large fonts, and minimal distractions to support students with low vision, as well as teachers and reviewers. The final product was a fully integrated audiobook that combined validated content, clear audio narration, accessible navigation, and supportive visual design. The results demonstrate that the developed audiobook successfully addressed students' learning needs, improved material clarity, and enhanced accessibility for visually impaired learners.

Discussion

The findings of this study emphasize the critical role of flexible, accessible, and learner-centered instructional media in supporting English language learning for visually impaired students. The use of audiobooks with clear narration, interactive activities, bilingual explanations, and contextually relevant topics was found to directly address learners' difficulties, particularly in vocabulary acquisition, pronunciation, grammar comprehension, and listening fluency. These features help compensate for the lack of visual input and promote meaningful engagement with English learning materials. This finding is consistent with Guha (2020), who reported that well-designed audiobooks significantly enhance learners' motivation and engagement, especially

among students with visual impairments. Audiobooks allow students to access learning content independently, repeat materials as needed, and learn at their own pace. Similarly, Saputra et al. (2022) highlighted that structured and accessible learning materials are essential in fostering autonomy and confidence among students with special needs. Therefore, audiobooks serve not only as alternative media but also as empowering tools that support inclusive education.

Furthermore, the integration of bilingual explanations was particularly beneficial, as it reduced cognitive load and facilitated comprehension. This approach aligns with inclusive pedagogy principles, which emphasize the importance of scaffolding and linguistic support for learners with diverse needs. The relevance of topics included in the audiobooks also increased learners' interest and contextual understanding, making English learning more meaningful and applicable to real-life situations.

The findings broaden both theoretical and empirical perspectives on how visually impaired students learn English. This study reinforces the view that effective learning for students with visual impairments requires instructional media that are not only accessible but also responsive to learners' characteristics and preferences. Audiobooks that incorporate interactive tasks, structured content, and clear audio quality contribute to a more learner-centered instructional approach. This result supports Guha's (2020) assertion that audiobooks function as motivational learning tools when they are intentionally designed to meet learners' needs. In addition, Saputra et al. (2022) emphasized that well-organized materials help students develop learning independence, which is crucial for visually impaired learners who often rely on self-directed strategies. The present study confirms that audiobooks can bridge gaps in current teaching practices, particularly in contexts where teachers have limited access to specialized instructional resources.

This study employed the Successive Approximation Model (SAM) proposed by Allen (2012) to guide the development of English audiobook materials for visually impaired students. SAM consists of iterative phases, including project planning, design, prototyping, evaluation, and revision. This model was particularly suitable for the present study because it allows continuous refinement based on learners' needs and expert feedback. According to Allen (2012), SAM is designed to be fast, flexible, and adaptive, making it more responsive than linear instructional design models. This flexibility is crucial in special education contexts, where learners' needs may evolve throughout the learning process. The iterative nature of SAM aligns with the criteria for effective audiobook development identified by Akbarani (2019), which include attention to vocabulary development, pronunciation accuracy, grammatical clarity, listening comprehension, and fluency. These components require repeated testing and revision to ensure effectiveness for visually impaired learners.

The effectiveness of SAM in this study is supported by previous research comparing SAM with more traditional models such as ADDIE. Sohaib et al. (2021) found that SAM resulted in higher learning outcomes and better conceptual understanding in STEM instruction due to its collaborative and iterative design process. These findings align closely with the present study, which demonstrated that SAM facilitated the development of more relevant, effective, and learner-responsive audiobook materials. The ability to incorporate feedback from experts and users allowed the instructional product to better meet the specific needs of visually impaired students.

Moreover, SAM's collaborative nature encouraged active involvement from developers, educators, and evaluators, resulting in a more inclusive and practical learning resource. This confirms that SAM is not only effective but also highly suitable for inclusive and special education settings. The iterative structure of SAM allowed the audiobook materials to evolve through multiple cycles of planning, prototyping, feedback, and revision. This process is essential in special education contexts, where learning needs are diverse and dynamic. Consistent with the findings of Sohaib et al. (2021), this study demonstrates that instructional materials developed through SAM are more adaptable and learner-oriented. Based on these findings, SAM is strongly recommended for the development of inclusive English learning materials, particularly for students with visual impairments. The model ensures that learning resources remain aligned with

learners' needs, instructional goals, and accessibility standards

CONCLUSIONS

Focusing on elementary school level students, this study concludes that the development of English audiobooks tailored to the needs of visually impaired students is both pedagogically relevant and practically effective when grounded in systematic instructional design and learner-centered principles. In line with the expectations outlined in the introduction, the findings demonstrate that conventional English learning resources used in special education contexts are insufficient to fully support visually impaired students' learning needs, particularly in listening and speaking skills. The developed audiobooks successfully addressed these gaps by providing accessible, structured, and engaging learning materials that align with the communicative goals of the curriculum and the real-life language needs of tenth-grade second semester visually impaired students at SLB Negeri 1 Tabanan.

The study further confirms that audiobooks can function as more than supplementary tools; when carefully designed, they become core instructional media that promote independent learning, motivation, and active language use. Key design elements—such as clear narration, bilingual vocabulary explanations, consistent unit structure, pronunciation modeling, and simplified listening tasks—proved essential in reducing cognitive load and enhancing comprehension. These features enabled students to engage more confidently with English input despite the absence of visual cues, supporting inclusive and equitable language learning.

From a methodological perspective, the application of the Successive Approximation Model (SAM) played a crucial role in ensuring the quality and relevance of the developed audiobooks. The iterative cycles of evaluation, design, prototyping, and expert revision allowed the materials to evolve responsively according to learners' needs and expert recommendations. This confirms that SAM is particularly suitable for instructional material development in special and inclusive education settings, where flexibility, continuous feedback, and adaptability are critical. The study therefore strengthens the argument that non-linear, iterative design models are more effective than rigid instructional frameworks for developing assistive learning media.

In terms of practical implications, the final audiobook product demonstrates strong potential for classroom implementation as well as independent learning support for visually impaired students. Teachers can integrate the audiobooks into daily instruction to supplement limited teaching resources, while students can use them for repeated practice beyond the classroom. The use of accessible digital platforms also indicates that such materials can be scaled and adapted for broader use in other special schools or inclusive education contexts in Indonesia. Regarding future prospects, further research may extend this development by involving larger numbers of students, conducting experimental or mixed-method studies to measure learning outcomes quantitatively, and expanding audiobook content to other language skills and grade levels. Future development may also explore the integration of interactive technologies, such as voice recognition or adaptive feedback systems, to further enhance learner engagement.

REFERENCES

- Akbarani, R. (2019). How to improve speaking skill using Treffinger learning model? *Eralingua: Jurnal Pendidikan Bahasa Asing Dan Sastra*, 3(2), 143–150. <https://doi.org/10.26858/eralingua.v3i2.10066>
- Allen, M. (2012). *Leaving ADDIE for SAM: An agile model for developing the best learning experiences*. Association for Talent Development.
- Bryant, D. P., Bryant, B. R., & Smith, D. D. (2019). *Teaching students with special needs in inclusive classrooms*. SAGE Publications.
- Dewi, R. K., Wati, D. D. E., Lasmana, O., Yermadesi, Festiyed, Ahda, Y., & Alberida, H. (2024). Development research in science education: A systematic literature review of trends in

- development models and instruments used. *Jurnal Penelitian Pendidikan IPA*, 10(5), 250–261. <https://doi.org/10.29303/jppipa.v10i5.6876>
- Fadlilah, M. (2022). The role of digital media in language learning for blind students at junior high school. In *Proceedings of the Sixth International Conference on Language, Literature, Culture, and Education (ICOLLITE 2022)* (pp. 304–307). Atlantis Press. https://doi.org/10.2991/978-2-494069-91-6_47
- Fansury, A. H., Lutfin, N., & Arsyad, S. N. (2019). Audio books as teaching media to blind students in learning EFL. *Klasikal: Journal of Education, Language Teaching and Science*, 1(1), 1–9. <https://doi.org/10.52208/klasikal.v1i1.4>
- Gkora, V., & Karabatzaki, Z. (2023). Motivation in learning disabilities and the impact of ICTs. *TechHub Journal*, 3, 14–26. <https://www.techhubresearch.com/index.php/journal/article/view/79>
- Guha, S. (2020). Creating audio books for children with visual impairment: The collaborative approach leading to virtual learning. *International Journal of Technology in Teaching and Learning*, 16(1). <https://doi.org/10.37120/ijttl.2020.16.1.04>
- Gunadi, Y. F., & Binawan, H. (2023). Difficulties in learning English faced by visually impaired student at inclusive school. *JIM: Jurnal Ilmiah Mahasiswa Pendidikan Sejarah*, 8(4), 3958–3969. <https://jim.usk.ac.id/sejarah/article/view/26223>
- Kim, N. Y. (2021). E-book, audio-book, or e-audio-book: The effects of multiple modalities on EFL comprehension. *English Teaching*. <https://eric.ed.gov/?id=EJ1331338>
- Nabiyev, A. I. (2022, February). The importance of listening in learning English. In *E Conference Zone* (Vol. 1, pp. 12–13). <http://econferencezone.org/index.php/ecz/article/download/7/5>
- Perrault, M. A., Lauer, G., Voss, S., Seitz, B., & Khanh, N. T. T. (2023). Visual impairment and low vision aids—A comparison between children and adults. *Journal of Personalized Medicine*, 13(11), 1608. <https://www.mdpi.com/2075-4426/13/11/1608>
- Rao, P. S. (2019). The role of English as a global language. *Research Journal of English*, 4(1), 65–79. [https://www.rjoe.org.in/Files/vol4issue1/new/OK%20RJOE-Srinu%20sir\(65-79\).pdf](https://www.rjoe.org.in/Files/vol4issue1/new/OK%20RJOE-Srinu%20sir(65-79).pdf)
- Saputra, R., Asrib, A. R., & Mappalotteng, A. M. (2022). Pengembangan media pembelajaran berbasis audio untuk siswa penderita tuna netra di SLB-A Yapti Makassar. *UNM Journal of Technology and Vocational*, 6(1), 63. <https://doi.org/10.26858/ujtv.v6i1.34303>
- Sohaib, M., Maheen, I., Ali, I., Farooq, M., & Khan, M. (2021). English language teaching to blind students in Khyber Pakhtunkhwa: An investigation of teachers' challenges. *Webology*, 18(4), 2739–2749. <https://www.webology.org/abstract.php?id=4212>
- Stahopoulou, A., & Siskou, K. (2023). Enhancing mental health promotion of students with learning disabilities: The role of motivation and digital technologies. *GSC Advanced Research and Reviews*, 16(1), 116–128. <https://doi.org/10.30574/gscarr.2023.16.1.0307>
- Vandergrift, L. (2007). Recent developments in second and foreign language listening comprehension research. *Language Teaching*, 40(3), 191–210. <https://doi.org/10.1017/S0261444807004338>
- Zahra, A., Butt, A., & Bhatti, S. A. (2022). A study of the challenges in teaching English as a foreign language to the students with visual impairment. *Global Educational Studies Review*, 7(1), 147–163. [https://doi.org/10.31703/gesr.2022\(vii-i\).16](https://doi.org/10.31703/gesr.2022(vii-i).16)

