
Evaluation of YouTube Audio Teaching Materials for Blind Students at SLB-A Beringin Bhakti

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Abstract: This study was conducted at Beringin Bhakti Special School (SLB) with the aim of evaluating the teaching media used by teachers during lessons. The research is titled "Evaluation of YouTube Audio Learning Materials for Blind Junior High School Students at SLB-A Beringin Bhakti." The main questions posed in this study include what teaching materials are used and the students' responses to the use of these materials. This research employs a qualitative approach with a focus on case studies to explore the evaluation of audio learning materials in the education of blind junior high school students at SLB-A Beringin Bhakti. The case study approach allows the researcher to investigate in-depth the interactions between students, teachers, and audio learning materials in a real context. The sample of this study consists of one blind student and one accompanying teacher who actively use audio learning materials in their lessons. Data collection techniques include observation, interviews, and documentation. The evaluation results indicate that YouTube audio learning materials have great potential in enhancing the learning experience of blind students at SLB-A Beringin Bhakti. However, efforts are needed to improve technical infrastructure and support to maximize the benefits of using these learning materials.

Keywords: Evaluation, YouTube, Blind Students.

INTRODUCTION

In today's educational era, inclusive education presents a significant challenge, especially in ensuring that all students, including those with special needs such as the visually impaired, have equal and high-quality access to education (Paramansyah & Parojai, 2024). This research aims to determine whether the use of audio-based learning materials is one of the developed approaches to support the learning of visually impaired students. Visually impaired junior high school students at Beringin Bhakti Special School (SLB) have successfully utilized this method. Inclusive education does not discriminate based on students' backgrounds, abilities, or special needs; instead, it strives to create a learning environment that supports student diversity (Wulandari & Harsiwi, 2024). Special Schools (SLB) in Indonesia offer inclusive education to students with a variety of special needs, including those who are visually impaired. SLB-A Beringin Bhakti is one such institution that educates visually impaired students at the junior high school level.

Visually impaired students face specific challenges in the learning process, particularly in accessing information presented in written form (Nadine & Yuliana, 2023). They need to use alternative learning methods to meet their needs due to their visual limitations. Audio-based learning materials are educational resources delivered through sound or audio recordings, allowing visually impaired students to hear information presented verbally. The use of audio technology can enhance information accessibility for visually impaired students and increase

their engagement in learning (Purnomo et al., 2023). By using audio materials, visually impaired students can improve their listening skills, enhance their understanding of learning materials, and boost their motivation to learn.

Listening skills are crucial for the learning process. Unlike sighted students, whose visual sense provides nearly 80% of information, for visually impaired students, hearing—also known as the sense of auscultation—serves as a vital source of information to compensate for their visual impairments. Visually impaired individuals also rely on hearing twice as much as reading for information (Badiah, 2016). One type of service aimed at improving the quality of human resources to align with societal development and progress is education. Chapter IV, Article 5 of the 2003 National Education System Law states that every citizen has the right to high-quality education, and clause 2 states that citizens with physical, emotional, mental, intellectual, and social disabilities are entitled to special education. This implies that education is not only intended for normal children but also for those with special needs (Ratnaningrum, 2022).

Learning materials are sets of knowledge that students should learn in an enjoyable manner. Instruction can generally be divided into two categories: print and non-print (Magdalena et al., 2020). Print materials can include handouts, books, modules, brochures, and student worksheets. Non-print materials encompass audio and visual resources such as cassettes, radios, compact discs, and web-based learning materials (Sulfemi, 2018). Audio-visual media combines sound and images; it is considered superior because it includes both auditory (hearing) and visual (seeing) elements. Audio-visual aids are media used in learning to assist written text and spoken words in transferring knowledge, attitudes, and ideas.

YouTube audio learning materials refer to educational content available on the YouTube platform delivered in audio format. These materials can take the form of videos that focus on sound, narration, or music as primary media for conveying information and educational content. Visually impaired students can utilize YouTube audio materials to support their learning, especially when facing visual limitations. YouTube offers a variety of audio learning materials that can be tailored for visually impaired students. For example, this content may include lectures, tutorials, concept explanations, or practice questions with audio. One major advantage of using audio materials on YouTube is their ease of access and wide availability since students can access them from anywhere with an internet connection (Laily Syarifatul Hani, 2023).

The use of YouTube audio learning materials also helps visually impaired students learn independently and customize their study times. They can repeat material as often as needed, replay difficult sections for better understanding, or adjust playback speed according to their comprehension levels. Additionally, YouTube is the largest online video platform globally that offers a wide range of content tailored to meet the learning needs of visually impaired students—particularly through the use of audio enhanced by visual elements. However, the primary focus of this content is audio; although it often includes images or text that help explain taught concepts. Sound stories or music frequently serve as the main medium in this content (Tindakan et al., 2017).

Previous studies have shown that audio learning materials improve learning outcomes for visually impaired students (Juliatuti et al., 2024). For instance, research by Jones (2017) found that visually impaired students using audio learning materials showed significant improvements in understanding material and completing assignments compared to those using conventional learning resources. This indicates that audio technology can be a powerful tool for supporting inclusive education for visually impaired students. SLB-A Beringin Bhakti is a special education institution serving visually impaired junior high school students. As part of Indonesia's inclusive education system, SLB-A Beringin Bhakti is responsible for providing a supportive learning environment that facilitates the educational

needs of visually impaired students. In this context, it is hoped that the implementation of audio learning materials at SLB-A Beringin Bhakti will aid in facilitating the learning process for visually impaired students.

The objective of this research is to determine how effective audio learning materials are in teaching visually impaired junior high school students at SLB-A Beringin Bhakti. This study will specifically identify the effects of using audio learning materials on student engagement in lessons, their perceptions of the subject matter presented, and any challenges faced while using audio technology in special education settings.

METHODS

This study employs a qualitative research methodology with a case study focus to explore the interactions among students, teachers, and audio learning materials in the education of visually impaired students at SLB-A Beringin Bhakti. By utilizing this approach, the researcher can conduct an in-depth investigation of the real interactions between the students, the teacher, and the audio learning materials. SLB-A Beringin Bhakti has one visually impaired junior high school student and one accompanying teacher participating in this research. This sample was chosen because it allows for the effective use of audio learning materials in their educational activities.

Data Collection Techniques

Observation

Observation involves monitoring and recording the phenomena under investigation. The researcher collects data directly from the subjects through observation, which can occur in both natural settings and specially designed contexts. This method enables the researcher to examine and document actions, events, or situations related to the research subject, thus ensuring that the collected data is more accurate and unbiased. In this case, the author conducts direct observations at SLB-A Beringin Bhakti to gain a comprehensive view of the school environment and to observe the interactions and activities of teachers instructing visually impaired students both inside and outside the classroom.

Interviews

An essential data collection method is interviews, which are used to gather comprehensive information about visually impaired children at SLB Beringin Bhakti. The researcher can obtain firsthand information from individuals such as teachers, school principals, and parents through structured questions. These questions allow for a deeper understanding of the conditions, needs, and challenges faced by visually impaired children at school. Interviews also provide insights into how teachers educate these children. This information is crucial as it offers a complete picture of the best methods employed by SLB Beringin Bhakti in educating these special needs children. Consequently, data obtained from interviews can serve as a foundation for developing appropriate programs or interventions.

Documentation

The researcher utilizes documentation to gather data from various written or electronic sources available at SLB Beringin Bhakti. Analyzing these documents can also provide insights into the approaches, techniques, and teaching media used by teachers in educating visually impaired children.

Data Analysis

Noeng Muhadjir (1998: 104) describes data analysis as "the effort to systematically search for and organize observation records, interviews, and others to enhance the researcher's understanding of the studied case and present it as findings for others." To improve this understanding, analysis must continue with efforts to seek meaning. In this

study, qualitative descriptive analysis will be employed to analyze the data. The research findings will be summarized in sentence form. Initially, the researcher will interview the school principal and staff members to understand SLB Beringin Bhakti's conditions better. The researcher will also investigate the teaching methods employed by teachers for visually impaired students through classroom observations. Subsequently, a comprehensive description of SLB Beringin Bhakti's role in educating visually impaired students will be provided. Data obtained from interviews, observations, and documentation will be thematically analyzed to identify emerging patterns and themes. Comparative analysis will also be conducted to compare data from various sources. Thus, the researcher will formulate conclusions and recommendations based on a comprehensive interpretation of evaluating interventions for visually impaired children at SLB Beringin Bhakti.

This structured approach ensures that all aspects of the research question are thoroughly explored and understood within their contextual framework, ultimately contributing valuable insights into inclusive education practices for visually impaired students.

RESULT AND DISCUSSION

Ki Hajar Dewantara, the father of national education in Indonesia, defined education as *"the demands in the life of growing children; its purpose is to guide all the natural strengths present in children so that they can achieve the highest safety and happiness as human beings and as members of society."* Humanizing humans is a humane process. Consequently, we should not be biased in respecting the human rights of every individual. Students are not robots that can be programmed; rather, they are a generation that we must assist and observe as they develop towards maturity. Thus, we can cultivate critical, thoughtful, and moral individuals. Education, therefore, not only shapes individuals who differ from others by providing them with basic needs such as food, clothing, and shelter but also humanizes humanity (Ab Marisyah¹, Firman², 2019 in journal (Ujud, Nur, Yusuf, Saibi, & Ramli, 2023)).

The essence of visual impairment is a condition where the eyes or visual perception experience limitations or an inability to see due to various dysfunctions. In this context, "tuna" means wounded, damaged, lacking, or non-existent. "Netra" refers to the sense of sight or eyes (Indriastuti, 2020). Literally derived from two Latin words, "tuna" meaning "not" or "less," and "netra" meaning "eye" or "sight," visual impairment can be understood as a condition where an individual loses or cannot use their sight normally (Nurzannah, 2021). This term describes a state where someone experiences significant visual limitations. It refers to individuals who have varying degrees of vision loss, ranging from severe impairment to total blindness. The condition can be temporary or permanent, depending on its causes and severity.

The term "visual impairment" refers to individuals who experience significant vision loss affecting their ability to see normally (Khoirin Nida, 2018). Types include total blindness, partial blindness, near blindness, loss of central vision, loss of peripheral vision, and dual impairment. Each type has different effects on an individual's daily life and may require specific assistance or approaches to help them function independently and feel included in society. Children with visual impairments exhibit various characteristics depending on their causes and levels of vision loss. They may have similar cognitive abilities to sighted peers but struggle with understanding information related to visual content. When interacting with others, visually impaired children often display heightened sensitivity to their surroundings by using touch and sharpening their auditory senses to interpret their environment. Consequently, they may appear rigid and express inappropriate remarks due to their inability to perceive situations visually (Ulya, 2022).

The research conducted at SLB-A Beringin Bhakti indicates that most teachers and students favor the use of YouTube audio learning materials. They report that these resources enhance their understanding of the subject matter and make learning more accessible. Furthermore, YouTube audio learning materials are assessed as meeting the needs of visually impaired students by presenting information in an easily comprehensible and organized manner. However, challenges such as unstable internet connections and technical setups for device usage remain issues that must be addressed when implementing these materials.

The evaluation results show that YouTube audio learning materials can significantly improve learning outcomes for visually impaired students at SLB-A Beringin Bhakti. Nevertheless, efforts are needed to enhance technical infrastructure and support systems to maximize the benefits derived from these educational resources. The integration of innovative technologies such as screen readers and text-to-speech software can further facilitate access to information for visually impaired students (Top 5 Accessibility, 2023). These tools enable students to engage with digital content independently and keep pace with their sighted peers.

Moreover, assistive technologies like braille displays and tactile graphics provide essential alternatives for understanding complex visual aids such as graphs and charts (Top 5 Accessibility, 2023). These tools allow students to explore physical representations of information effectively across age groups—from children encountering science concepts for the first time to adults pursuing advanced degrees.

Additionally, educational apps designed specifically for visually impaired students offer interactive elements that make learning engaging. Platforms like Learning Ally provide accessible audiobooks that cater to younger students with visual impairments (Top 5 Accessibility, 2023). Such resources not only enhance academic performance but also foster a sense of inclusion within the classroom environment.

In conclusion, this study emphasizes the importance of adapting educational methods to meet the unique needs of visually impaired students. The positive reception of audio learning materials indicates a shift towards more inclusive practices that recognize diverse learning styles. As we move forward in educational settings like SLB-A Beringin Bhakti, it is essential to continue exploring innovative solutions while ensuring that all students have access to quality education tailored specifically for their requirements. This approach will ultimately contribute to building a more equitable educational landscape where every student can thrive and reach their full potential.

CONCLUSION

In conclusion, the findings of this study demonstrate that YouTube audio learning materials significantly enhance the educational experiences of visually impaired students at SLB-A Beringin Bhakti by fostering greater engagement and accessibility. However, to maximize these benefits, it is essential to improve technological accessibility and the institution's technical infrastructure. Recommendations include developing a more diverse range of content tailored to the specific needs of visually impaired students and ensuring stable internet access. By addressing these challenges and integrating assistive technologies alongside audio materials, SLB-A Beringin Bhakti can create a more inclusive educational environment that supports all students in achieving their full potential.

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