

## IMPLEMENTATION OF THE TALKBACK APPLICATION IN IMPLEMENTING THE LEARNING OF CLASS XI BRANJANGAN STUDENTS AT SLB STATE BRANJANGAN JEMBER

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### Abstract

This study aims to describe the application of the Talkback screen reader application in the implementation of learning for blind students in class XI at the Branjangan Jember State SLB and to examine the obstacles and solutions for implementing the Talkback screen reader application in the implementation of learning for class XI blind students at Branjangan Jember State SLB. By using a qualitative descriptive approach. Data analysis uses 3 stages, namely data reduction, data presentation, and drawing conclusions. The subjects in this study were 3 blind students. The results of this study are that the application of the Talkback screen reader application in the implementation of classroom learning has been going on since 2018. In its implementation, schools, teachers, and especially blind students have had many positive impacts, such as helping in learning and learning activities. However, these are still experiencing obstacles originating from school institutions, teachers and the children themselves. Another obstacle is due to the inadequate availability of funds. Of these constraints there are solutions that have been implemented and some are still in the planning stage.

Keywords: Talkback Screen Reader Application, Learning Implementation, Blind Students

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### INTRODUCTION

The government's attention to education for children with disabilities or special needs (ABK) in Indonesia has increased from year to year. This is marked by efforts to provide educational facilities and infrastructure, educational curricula, as well as efforts to foster educational staff, to improve the quality of education in achieving national development success, including children with special needs.

This is supported by the opinion of Hamidi (2016), that philosophically the nation's founders aspired to provide absolute legal protection and guarantees that education and work must be felt and enjoyed by every citizen, and to realize this mandate the strategies It is very important to carry out and apply legal protection for the fulfillment of the right to education and work for every Indonesian citizen, without discrimination, through a

system of legal protection based on Pancasila and the 1945 Constitution of the Republic of Indonesia.

So here, one example of a child with a disability is a blind child. Blind children are one of the sensory disabilities who experience visual impairments, in accordance with the opinion of Meylani (2021), stating that blind children are humans who have limbs that function properly but their sense of sight is impaired. One of the obstacles for blind children is the absorption of information obtained visually so that it has an impact on obstacles in carrying out learning activities. This is in line with the theory that blind children are individuals whose second sense of sight does not function as a channel for receiving information in daily activities like an alert person (Badiah: 2021). Obstacles in learning activities for blind students require models, strategies, and learning media that are adapted to the characteristics of the blind so that blind students can optimally absorb the material provided by the teacher and obtain optimal results. This also does not rule out the possibility of blind children being taught to be independent in their daily activities, especially independently during the learning process at school..

This is in line with the opinion of Aulia et al (2020), that blind people need gradual, continuous and serious training in independence activities with the aim of instilling an independent attitude in blind people so they don't always depend on other people to fulfill their life needs.

In addition, blind children need aids or media to support their independence. For example, one of the learning aids/media that is adapted to the characteristics of the blind is shaped or raised and sound. This is in accordance with the statement from Wibawa (2020), difficulty recognizing objects in blind students is caused by a lack of media used in the learning process, the media used must be in accordance with the deficiencies experienced by students, namely they cannot see objects but need media that can be touched. directly by students. Therefore, media is needed that can support the learning process, which in this case is media in the form of three dimensions or media that is capable of producing audio (sound). So that blind children can learn without sight. This is important so that blind children can continue to participate in learning even without sight by utilizing other senses, such as hearing, touch, smell, and taste.

Assistive-based technological aids such as screen readers are an example of alternative assistive devices for visually impaired people. There are screen readers on computers, laptops and smartphones. This technology allows blind people to access and use computer and smartphone technology. According to Sulistyowati & Rafi (2020), a screen reader or screen reader is a screen reader feature or software that is useful for helping blind people use computers to smartphones. According to Putra & Wulandari (2022), Talkback is a screen reader feature system that is used to facilitate the use of Android smartphones by the blind. This talkback system has features designed for Android users with limited vision and visually impaired people, such as minimal or enlarged eyes (low vision), astigmatism or other visual impairments. Fathurahmat (2021), also argues

that talkback, namely talk means talking, and back means returning or in the sense of talkback, it means repeating again. This application has features that are specifically designed for Android users who have vision limitations, for example min or plus eyes, astigmatism or other visual disturbances. The general function of this application is to say everything we do on an Android phone or read all the writing or letters and numbers with audio output, for example typing a name, entering menus, settings, opening applications and so on. Screen reader on android.

With this, teachers can utilize technology in implementing learning for blind students to use screen reader technology on smartphones (Talkback), according to a statement from Effendi & Wahidy (2019), With 21st century learning, one of which is related to the use of technology. 21st century learning applies learning and learning skills as well as innovation, information skills, media and technology (digital literacy). This research will examine the descriptive application of the TalkBack screen reader application in the implementation of learning for class XI blind students at SLB Negri Branjangan Jember.

#### RESEARCH METHODS

This research method uses a qualitative descriptive approach, a case study type, because based on the purpose of this study, it is not to examine a hypothesis, but to collect data in the form of field facts regarding the application of the TalkBack screen reader application in the implementation of learning, which will reveal and describe it in more detail. in depth, about describing the application of the Talkback screen reader application in the implementation of learning for blind students in class XI at the Branjangan Jember State SLB and examining the obstacles and solutions for implementing the Talkback screen reader application in the implementation of learning for class XI blind students at the Branjangan Jember State SLB. As stated by Hanyfah (2022), that a qualitative descriptive approach is a research method based on data processing that is descriptive in nature. Descriptive qualitative research is conducted to explain existing research without providing manipulation of the variable data studied by conducting interviews, observation, and documentation. In this study the researcher will be present as a participant observer (observer), which means that during the research process will be carried out, the researcher will be present in carrying out the implementation of screen reader applications (talkback) in the implementation of learning in class XI blind students at Branjangan Jember State SLB, to be able to get maximum results. In this study, the subjects or research informants were three class XI blind students. While the school principal and homeroom teacher who teach class XI as informants. This study applied data collection procedures, using interview, observation, and documentation techniques. Then the data obtained was analyzed using qualitative data analysis techniques. Qualitative data analysis is a series of 3 (three) activities, namely: Data reduction, data presentation and conclusion/verification, or commonly known as data analysis, (Miles and Hubermen, 2019: 16)..

## RESULTS AND DISCUSSION

The application of the TalkBack screen reader application in the implementation of learning for blind students at the Branjangan Jember State SLB itself has been running since 2018. Schools have started introducing talking smartphone tools based on the TalkBack screen reader application since junior high school. In this case, precisely in class XI, there are 3 blind students who are already able to operate a talking smartphone based on the TalkBack application. In practice, the teacher as well as the homeroom teacher for class XI stated that when learning and learning activities in class students are encouraged to use talking smartphones, this aims to create a more advanced and innovative learning experience. During the implementation of learning the teacher said that before starting the lesson the teacher had prepared teaching needs such as lesson plans, media or student and teacher aids themselves, and a wifi connection. Here teachers and students more often use the WhatsApp application as a medium for distributing subject matter and giving assignments or collecting student assignments themselves. While the Google application or web browser is a source of learning literacy for students.

In accordance with the statement of the class XI homeroom teacher that so far the student response to the implementation of a talking smartphone based on the TalkBack screen reader application has been very good. However, the drawbacks of implementing the TalkBack screen reader application-based smartphone in the implementation of learning in the classroom itself cannot be applied or carried out in every subject such as reading and writing the Qur'an, arts and culture and practical subjects. But here it was found that all students not only used the TalkBack screen reader application, but also used several other screen reader applications such as Commentary Screen Reader (CSR), Voice Vocalizer, and Voice Assistant. The reason students use more than one screen reader application is because the TalkBack screen reader application is not very responsive or slow in reading which is caused by the specifications of the smartphone speaking students who are less able to fully operate the TalkBack application. So here students are outsmarted by using an additional screen reader application that is lightweight and can be operated on a student's talking smartphone, to help overcome student obstacles or obstacles in using the TalkBack screen reader application. The application of the TalkBack screen reader application in the implementation of learning for class XI blind students at SLB Negri Branjangan Jember experienced several obstacles. These obstacles come from 3 things, namely schools, teachers, and also from the students themselves. The following will explain in detail about these 3 obstacles.

In the implementation of the TalkBack screen reader application in the implementation of learning, blind students in class XI experienced problems originating from the school and teachers, namely that the school and teachers did not have additional hours or special learning to study smartphone operation to speak in more depth. here the teacher also expressed the appropriate thing during the interview, "If there is no special learning, there is special ICT learning on computers or laptops. But usually students learn

on an autodidact basis where students learn to operate smartphones talking from friend to friend. Because students here have extensive relations or relationships ranging from various regions to foreign countries.”

Second, according to the results of observations, the facilities and services are also inadequate, such as books related to talking smartphones, providing talking smartphone tools for students who don't yet have talking smartphone tools, and the lack of teacher knowledge of speaking smartphone knowledge..

Constraints Derived from Students, In implementing the TalkBack screen reader application in implementing classroom learning, students experience problems with talking smartphones based on the TalkBack screen reader application which is less responsive to navigate various applications or learning resource sites on the internet, this is due by smartphone devices students have less than optimal specifications to operate the TalkBack screen reader application. Not only that, one student also said the problem was when reading e-books or subject matter that one cannot read pictures or icon symbols and the TalkBack screen reader application is also unclear in reading text in English and symbols or formulas in mathematics. .

The application of the TalkBack screen reader application in the implementation of learning for class XI blind students, teachers and schools has found a solution, but it is not optimal. This Solution has been Executed and is still in the plans. However, this solution has not produced results. These solutions include: obstacles for school institutions and teachers. For obstacles related to additional learning, the principal has planned efforts in the future to hold additional hours regarding additional learning to learn talking smartphones. As for the solution to the constraints on facilities and services, to provide facilities such as talking smartphone aids and books on using talking smartphones the principal is still working on them. Likewise with the services of educators or teachers who are still minimal regarding smartphone speaking knowledge, the principal will ask educators or teachers to further compensate or improve in teaching, especially on speaking smartphone knowledge..

While the solution for the students themselves, the teacher has made efforts such as explaining in detail related to images, symbols or formula icons that cannot be read by screen reader applications on talking smartphones. Meanwhile, students have their own ways or solutions to overcome the heavy talkback screen reader application in navigating various applications and learning resource sites or browsing the internet. The solution is to install or use additional screen reader applications such as Commentary Screen Reader (CSR), Voice Assistants and Voice Vocalizers where these applications are lightweight and can be used on smartphones with medium to lower specifications. Not only that, some of these additional applications also have many features that make it easier for blind people, especially this is a blind student in class Xi. Students are easier or lighter in navigating to various applications and when browsing the internet.

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### Conclusion

The application of the TalkBack screen reader application in the implementation of learning for blind students in class XI has been going on for several years. From the school and teachers have made every effort to implement learning as much as possible so that it can help blind students, especially in class XI who have implemented talking smartphones as a tool to help students in learning activities in class. With the talking smartphone tool based on the TalkBack screen reader application, students are more enthusiastic about learning and can make it easier for blind students to reach subject matter or other knowledge, because students no longer need to carry or look for heavy Braille books to look for braille books that are easy to read. few in school. With the smartphone as a tool to talk blind students are more flexible in accessing all subject books in class, and teachers also don't feel confused in giving material to assignments to students. Because by providing subject matter through Word, PDF, and Txt documents, blind students can already access it with the talking smartphone tool based on the TalkBack screen reader application. However, the implementation of the TalkBack screen reader application in the implementation of learning for blind students in class XI, cannot be said to be perfect because there are still several obstacles found. Therefore, in the future, schools will try to improve services and learning facilities in the classroom even better.

### Suggestion

- a. Suggestions for School Institutions, actually the school has planned a good effort, in order to meet the needs of students. It would be nice if the plan is immediately realized soon. The suggestion that teachers should do is to gain knowledge on talking smartphone aids. With more knowledge related to talking smartphone aids, educators can introduce and guide blind students to talking smartphone aids. then suggestions for students must be more active in participating in class learning because it will be useful as a provision in the future. and Students must be able to use smartphone tools to speak well and wisely, and become even more enthusiastic in learning because with these tools students can access everything, especially knowledge of lessons at school easily.
- b. Suggestions for Researchers should compare the implementation of the TalkBack screen reader application in the implementation of learning in SLB related to other school institutions in order to produce broader and in-depth research.

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