Analysis of Problematics in the Application of Technology Based Learning Media in Children with Disabilities

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Abstract
Education is the right of every child of the nation, including children with disabilities. The rapid development of information technology has made the world of education also need development in conveying information related to learning. One component in the world of teaching and learning that needs to be developed is media. However, in its implementation, it often encounters various problems, especially for children with disabilities who of course require special attention. The purpose of this research is to find out the problems of implementing Learning Media for children with disabilities in the information technology era. The research method used in this research is literature study with data collection techniques in the form of documentation of the results of information in books, articles. Data analysis technique using content analysis. The results of this study are sharing the problems of applying learning media for children with disabilities in the era of information technology development.
Keywords: problematics, learning media, disability

A. Introduction

Liberal Education interprets education as attention to a number of subjects, which have been organized, the curriculum is directed at a logical development following systematic lines of knowledge that is aimed at intellectual development, part of the mission and places the ability to reflect on students/students as a very important opportunity. valuable (Burhanudin, 2015). Every child has the right to receive education, including special children or children with special needs. In the United States, since the mid-1960s and 1970s, various courts, houses of representatives and Congress have apparently recognized the rights of children who have disabilities. To be precise, in 1975, the Public Law, Education for All Handicapped Children Act, was implemented. This congress indicated that children or students with disabilities would be given appropriate education for free (Santrock: 2018).

In Indonesia itself, it seems that children with disabilities are provided with adequate educational services, one of which is through the Special School program or what is commonly known as SLB and inclusive schools. Apart from that, usually events will be held specifically for children with disabilities, where each school or institution sends their children to take part or participate in these activities. As implemented in Bangka Belitung, in practice events are held and each person with disabilities will be motivated and develop their interests and

talents. In this event, solo song competitions, dancing, playing music, drawing, creating and reading poetry, reciting the Koran and so on were held. This shows that Indonesia has paid attention to the children with disabilities program.

Special and inclusive school programs are spread across various regions in Indonesia considering that the number of children with disabilities is not small. This is one example that Indonesia has implemented the importance of education for all its citizens. In carrying out learning activities in schools, whether schools for general children or children with disabilities, of course, cannot be separated from the learning component. These components include materials, tools, strategies, evaluation and also media. And this media is one of the most urgent components (Esti Untari, 2017).

Learning media is media that helps teachers in efforts to broaden students' horizons, through various types of media used by teachers they can make material for providing knowledge (Septi Nurfadhillah et al, 2021). Learning media was initially only used as a visual aid, in this case acting as a means to motivate student learning, however, along with the rapid development of information technology, especially in the industrial era 4.0, various audio-visuals have emerged which place greater emphasis on the use of concrete experiences (Abdul Wahid, 2018). In this case, it can be understood how important learning media is as an integral part of learning which is a tool that helps teachers as providers of information to students as recipients of information to achieve the set learning goals.

However, its implementation often experiences problems or obstacles, especially for children with disabilities who of course require special media, special attention and patience. Children with disabilities are children who experience disabilities. Children who fall into the category of people with disabilities include sensory/sense organ disorders, physical disorders, language and speech disorders, mental retardation, learning disorders, ADHD and emotional and behavioral disorders.

Based on these various statements, researchers were treated as conducting this research in order to obtain information related to learning media and its problems for children with disabilities in this era of information technology development. It is hoped that this research can answer issues circulating in society, especially institutions that serve children with special needs.

B. Method

This research uses a qualitative approach with a descriptive-analysis method of library research or what is usually called library research. The validity of the data is tested through various relevant literature such as journals, scientific articles and related books. This research refers to a series of activities that are related to collecting library data, reading, taking notes and also processing the materials used in research. This research can also be interpreted as research which is

carried out by reading related journals, related magazines, related books, encyclopedias or various other related data sources in the library. (Untung, 2019).

C. Result
The Nature of Learning Media

From a linguistic perspective, media comes from the word medius which means middle. Learning media is basically a tool which is used as an intermediary or liaison between teachers and students as recipients of information and has the aim of stimulating students to be motivated, so that they can participate in learning activities as a whole. In this definition, media is defined as: First, a message intermediary in teaching and learning process activities. Second, media is a source of learning. Third, media is a tool in motivating students. Fourth, media is an effective tool to support successful learning. Fifth, media is a component for achieving set learning objectives (Hasan, 2021).

Based on sensory perception, media is divided into three, namely: First, audio media, this media basically uses ear instruments as a support for hearing. The sound in this media is of course very reliable. Examples of audio media include sound recordings, radio and so on. The characteristics of this audio media are that it is able to overcome limitations (space or time), as explained above, an example of audio media is sound recordings, these recordings can of course be played back later. The next characteristic is the child's imagination. In this case, children will develop their imagination through existing sounds.

Second, visual media, different from the media above, this visual media uses the eye as a support for seeing. Examples of visual media include: pictures, posters, graphs, charts. The characteristics of this media are: student-oriented, can be controlled by the user himself, displays one-way communication. Third, audio visual media, this media does not only use one instrument, but uses the senses of hearing and sight. Examples of audio visual media include documentary videos. The characteristics of this media are that it provides direct experience, students' memory and understanding increases, the knowledge attained by students increases and so on (Fernando, 2020).

According to Sujana and Rivai, learning media has provided contributions or benefits in the teaching and learning process such as: (a) Students will learn more, because they are not just listening to the teacher but rather observing, doing, exhibiting and demonstrating. (b) Teachers will have variations in teaching, not just using verbal communication. (c) Making learning materials more meaningful, thereby enabling mastery and achieving the set learning objectives. (d) Media makes learning more interesting so that ultimately students are motivated to learn (Suparlan, 2020). This shows that the presence of media basically contributes greatly to the success of teaching and learning activities. It is this contribution that needs to be considered important, especially for teachers to utilize existing learning media in a more interesting way of delivering it.

Learning Media and Technology

Learning media is very important in activities or carrying out learning activities. Perhaps learning activities are more centered on the teacher or in other words, the media is not used much by teachers and when it is used it is only as a fleeting tool. It is issues or views like this that seem to mean that there is no effort to empower the media. Vice versa, learning is possible without needing to present a teacher, this learning is called self-instruction. In teacher-based learning, generally learning media provides nothing other than direct supplementary support. Media that is created and adequate will improve or advance learning and provide teacher-based learning support and the level of effectiveness of the media depends on the teacher who uses it (M. Miftah, 2013).

The rapid development of information technology makes it seem like society has to follow it. Moreover, the development of this technology is considered as a solution to solve existing problems. In the world of education, the development of information technology is very useful, especially during the Covid-19 pandemic, where the education system in Indonesia, after the implementation of stay at home and work from home, study at home and work home, online learning or online learning for PAUD has been implemented. to University. Online learning is learning that is carried out remotely via media such as the internet, cell phones and computers. Online learning emphasizes students' accuracy and astuteness in receiving and processing information online (Hilna Putria et al, 2020). Online learning is also said to be learning that takes place in a network where the teacher and those being taught do not meet face to face and utilize the internet network in the learning process (Albert Efendi Pohan, 2020).

Various impacts have been felt due to the development of information technology as a medium in the world of education. This impact is divided into two, namely: (a) Positive Impact, the development of information technology as a medium has a positive impact, including that teachers and students will find it easier and more pampered and easier, because something they want can be achieved in an instant. For example, the ease of sending messages. Ancient people may have found it very difficult to send messages, and even receiving messages took quite a long time. In contrast to this, developing information technology has created a platform such as WhatsApp to make sending messages easier. The next example of convenience is the ease of finding information.

No matter how far the distance is, information technology makes it very easy for someone to get information in a matter of seconds. (b) Negative impacts, including finding many individuals who are lazy to socialize physically or in person, increasing the phenomenon of bullying, widespread slander and defamation, distancing those who are close due to preferring interactions with cyberspace, neglecting tasks and work. One of the reasons is doing entertainment with games or online games until you become addicted and forget about your responsibilities. Wasting time on useless things. The existence of these two impacts basically depends on each individual's use. In this case, teachers and

parents need cooperation to supervise their children when using information technology.

The Nature of Children with Disabilities

Disability means limited ability. People who suffer from disabilities are called handicaps. Conditions like this are caused by nothing but personal factors, the physical environment and society (Lewis, 2002). The groups of children who fall into the category of people with disabilities according to Santrock (2018: 221-237) are: Impaired senses, both the sense of sight and the sense of hearing (Low vision). Children who suffer from this visual impairment usually have vision distances of around 20/70 and 20/200 (normal figures are 20/20). If corrective lenses help.

Children with this disorder can read books, although they have to use large letters or with the help of magnifying glasses. However, children who are educationally blind apparently cannot use their sight to learn and have to rely on hearing or touch. Children who have hearing loss usually have difficulty in learning activities. Especially in children who can be said to be deaf from birth or write from an early age, usually when they are weak in language or speaking skills.

Physical disorders in the form of: (1) Orthopedics, are movement disorders which are caused by problems with the muscles, joints or bones. Other causes of this disorder are prenatal, perinatal problems and illnesses or accidents during childhood. (2) Cerebal palsy, this disorder is characterized by weak muscles, the body is very weak and shaking, and speech is not clear. Usually this disorder is caused by a lack of oxygen during childbirth. (3) Seizure disorders, in this disorder, the most common type is epilepsy. The child will be unconscious and stiff, shaking and acting strangely. However, if there is no recurrence, the child is like a normal child in general.

Mental retardation, those who experience this disorder are usually weak in their intellectual functions (Ziglerr, 2002). Apart from that, it is also difficult to adapt and even difficult to develop. Caused by genetics or Down syndrome as well as damage to the brain due to infection.

Language and speech disorders, such as: voice disorders, articulation, fluency, voice, difficulty in receiving information and difficulty in expressing language. (1) Articulation disorders, sufferers of this disorder usually have difficulty communicating and feel embarrassed. (2) Voice disorders, characterized by unclear sound, too loud, loud, too high or even too low. When speaking it is very difficult to understand. (3) Fluency disorders, known as stuttering. It is characterized by a child's speech which is of course halting, repetitive or has long pauses. (4) Language disorders, having characteristics such as difficulty in understanding or verbal commands, difficulty speaking, difficulty in composing questions. Apparently this disorder can cause serious problems in learning (Bernstein and Tiegerman-Farber, 2002).

Attention Deficit Hyperactivity Disorder (ADHD), Children who experience this disorder usually have difficulty paying attention to what is instructed by the teacher. He is easily distracted, cannot sit still, has very messy handwriting, lacks attention, is hyperactive, impulsive.

Behavioral and emotional disorders, usually consisting of serious problems and also continuing to be associated with depression, aggression, deep feelings of fear (both individual/school problems), as well as characteristics of social-emotional inappropriateness.

Learning disabilities, children who experience this disability usually have problems with the ability to concentrate, hearing, speaking, memory, thinking, reading, spelling, writing and social skills.

D. Discussion
Application of Learning Media for Children with Disabilities
The application of learning media for children with stability is very necessary. This is none other than the result of them experiencing relative obstacles in their development (Sigit Dwi Laksana et al, 2016).

Sensory disorders, learning media for children with visual impairments include: print media (books and braille sheets of paper), tactual-based media (emergent charts, embossed graphs, embossed maps, miniatures or imitation objects), audio media (sound recordings, CDs, radio, tape), computer-based media (braille displays, online braille libraries, JAWS programs), media which are based on real objects and the environment. Meanwhile, learning media for children with hearing loss include: musical instruments, media that stimulates the auditory, speech trainers, pictures accompanied by writing, phrases, real objects and imitation pictures as well as articulating mirrors (Rr Dina Kusumawardhani, 2020) .

Physical disorders, learning media for children who experience physical disorders can be in the form of a ball pool. This has no other purpose than to encourage movement, muscle tone and coordination. Apart from that, activity carpet media such as puzzles, snakes, beads and so on (Rr Dina Kusumardhani, 2020).

Mental retardation, generally children who experience mental retardation disorders have low intelligence or intelligence and cannot care for themselves, self-control, social responsibility. Media that can be used include: print-based media with attractive colors, human-based media, real object media, puzzles, audio-visual media and so on.

Speech and language disorders, learning media that can be used for children who experience this disorder include print media which contains several written words so that children will start to be a little more willing to pronounce the words, picture media, audio media, audio visual media, speech trainers and other media. human based.

Learning disorders, several learning media that can be used for children who experience learning disorders are: (1) Print media such as books, magazines and loose sheets. (2) Human media such as teachers, whether class teachers, supervisors or field teachers. (3) Visual media such as geometric media, images, letters or numbers, puzzles, miniatures, whiteboards. (4) Audio Visual such as. (5) Media with original media.   (6) Computer-based media (Rr Dina Kusumawardhani, 2020).

 Attention Deficit Hyperactivity Disorder (ADHD), In general, children who suffer from ADHD experience inattention, hyperactivity, poor concentration levels, and easily get bored doing assignments. The learning media used can be print media (books with attractive colors and pictures), tactual media (artificial and miniature objects), puzzles, fishing rods to train concentration, ball toys and audio, audio-visual media and media based on computer.

 Behavioral and emotional disorders, in general children with this disorder will experience depression, aggression, depression, fear which are related to personal problems, school and social-emotional characteristics. The learning media used are human-based media, print-based media, tactual media, audio/audio-visual media and computer-based.

Analysis of the Problems of Learning Media for Children with Disabilities in the Era of Information Technology Development
The rapid development of information technology has made the world of education also require development in conveying messages or information related to learning. One component in the world of teaching and learning that needs development is media. The learning media used of course adapts to what is needed and is in accordance with the realm of technological developments currently being faced. For children with disabilities, learning media is used as an aid in teaching, providing concrete experiments and inspiring motivation.   In general, the era of information technology development is very thick with the digital world, of course in practice it also invites various problems, especially for children with disabilities who are different from normal children.

However, quite a lot of teachers are less interested in using media in their learning process. This often invites various problems. No matter how much media, it does not guarantee that teachers are motivated to use it or even feel a burden, if a teacher cannot use the media and on the other hand does not want to find a solution. Nowadays, there are quite a few teachers who in their teaching use the old paradigm, where they think that the teacher is the only source and that learning resources that should be used are simply ignored.

Students' disinterest in the media used is due to a number of media being of poor quality and not easily accessible. The disinterest shown by students can be seen when students seem reluctant and not enthusiastic about learning. In this way, students who are forced to learn using this media seem to be burdened until in the end the set learning objectives are not achieved. Not only that, students who are

not interested are not caused by the media itself, but rather by how the teacher presents material using that media considering that not all media is suitable for use in all subject matter (Syifa Nur Syafitri, 2021).

The following are several other problems faced, including: (1) The media that supports a curriculum is not complete. Especially the curriculum for children with disabilities. (2) There is no special media storage space available, so quite a lot of media is damaged due to not being maintained or even lost. (3) Not all of the media needed is available, this allows teachers to create their own while the teacher's knowledge and insight is very limited. (4) Media utilization is not yet optimal. (5) Teachers lack creativity in making media, so the media used is less than optimal. (6) Teachers' unwillingness to use media because they feel it is difficult to use (Esti Untari, 2017). Furthermore, the lack of technology on the part of the teachers or educators themselves is due to the age factor, so they tend to be more engrossed and accustomed to using the media they usually use until children feel bored.

E. Conclusion

Learning media is very necessary in the world of education, both for the education of normal children and education for special children. Considering that the current era is an era of information technology development, the existing components in the world of education also require development, including learning media. In this era, there are many digital-based learning media such as the platforms offered. However, in its implementation there are many problems, both caused by the teacher's own ignorance and inadequate supporting facilities and infrastructure.

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