

USE OF ADAPTIVE LEARNING MEDIA FOR CHILDREN WITH SPECIAL NEEDS IN INCLUSIVE PILOT MADRASAS

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Abstract. Learning media has an important role in the learning process in the classroom. Adaptive learning media is important to use for learning children with special needs. Through this adaptive media, children with special needs can understand the subject matter well. For this reason, the purpose of this study is to explain the use of adaptive learning media for children with special needs in the inclusive madrasah. Descriptive qualitative research method with data collection techniques through interviews, observation and documentation. The results of the data related to adaptive learning media for children with special needs were analyzed using three principles, namely reduction, classification and verification. The results showed that adaptive learning media in inclusive madrasahs could help children with special needs understand the lesson.

Keywords: learning media, adaptive learning media, children with special needs.

INTRODUCTION

One of the goals of the Republic of Indonesia as stated in the preamble to the 1945 Constitution is the intellectual life of the nation. To realize this, Article 31 paragraph (1) of the 1945 Constitution mandates that every citizen has the right to education. This is certainly a solid foundation that every Indonesian child has the right to go to school and get the right knowledge at every level of educational institution. Equitable education must also be felt by all levels of society who have disabilities or are called children with special needs "ABK" (Smith, 2006).

Regulation of the Minister of National Education Number 70 of 2009 concerning Inclusive Education, describes that inclusive education is an education system that provides opportunities for all students who have disabilities and have the potential for intelligence and/or special talents to participate in education or learning in an educational environment together. -same as students in general. In article 6 paragraphs 1-3 it has been stated that the district/city and provincial governments guarantee the implementation of inclusive education and ensure the availability of inclusive education resources (Copy of the Minister of National Education, 2009). Reporting from kliping-um (2019) The Indonesian Minister of Education and Culture requires schools to accept children with special needs.

Released from RRI Purwokerto, at least 15 schools/madrasah under the auspices of the Ma'arif NU Educational Institution (LP) of Central Java Province were targeted for the implementation of the inclusive education service program. Of the 15 schools, seven of them are in Banyumas Regency. This was strengthened by a statement from the Cooperation Officer of the Ma'arif NU Central Java LP and Unisef Mr. Asadul Yusro who stated that this program was in collaboration with Unicef from 15 madrasah that were the target of the inclusion program, some of which were in Banyumas Regency. MH Rohmah, Deputy Secretary of the Ma'arif Prison, Banyumas Regency, during the past year there were 33 schools that were assisted by the Maarif Prison in Central Java for the implementation of inclusive education. The three schools are MI Salafiyah Kebarongan, MTs Maarif 1 Sumpiuh, and MTs Al-Hidayah Karangsucu Purwokerto. In addition,

several schools and madrasas are currently in the pilot phase of inclusive madrasas. One of them is MI Maarif NU 1 Karangkemiri.

The success in teaching students with special needs at MI Maarif NU 1 Karangkemiri cannot be separated from the learning media used by teachers accompanying students with special needs. According to Muhammad Yaumi (2018), media is anything that delivers and presents information from a source to a message recipient, whether it acts as a communication line, a communication tool, a means of presenting information, or a method that connects someone with information. The purpose of learning media is to facilitate learning activities (Smaldino, 2012). For children with special needs, the learning media used must be adjusted to the types of obstacles, disabilities, and needs of the child. That's why adaptive learning media is needed. The selection of learning media adapted to the objectives, needs, materials, abilities and characteristics of children will greatly support the efficiency and effectiveness of the learning process and results (Pasuang, 2019).

In this study, researchers focused on the use of adaptive learning media. Researchers are interested because they want to know how to use adaptive learning media for children with special needs in inclusive pilot madrasas, namely MI Maarif NU 1 Karangkemiri in using media as an intermediary in the learning process for students with special needs so that they can study together with other regular students in the education unit. under the auspices of LP Maarif.

This study complements previous research conducted by Ghina (2017), with the aim of knowing the availability of learning media in the inclusive classroom. In this study, the authors not only want to know the existence of learning media but also describe the use of adaptive learning media for students with special needs in inclusive pilot madrasas.

RESEARCH METHOD

The methodological tools used in this research are qualitative-descriptive. That is, the framework of the method used refers to a qualitative approach that emphasizes information in the form of phenomena which are then presented with the development of ideas that are explained with arguments based on theory and reflection (Nasution, 2015). The phenomenon studied is related to adaptive learning media used for children with special needs in inclusive pilot madrasas. The author conducted research at MI Maarif NU 1 Karangkemiri which is one of the inclusive pilot madrasas under the auspices of the Maarif LP, Banyumas district.

Data identification was carried out through three techniques: (1) Observation as a way of conducting intensive observations (Moleong, 2019) on adaptive media used in the learning process of children with special needs at MI Maarif NU 1 Karangkemiri (2) Interviews in context to obtain direct data from informants (Muhadjir, 2018) namely accompanying teachers, school principals, and ABK students; (3) The documents studied are documents that discuss adaptive learning media for children with special needs and documents in the form of other supporting references.

Triangulation The data collection technique to test the credibility of the data is done by *checking*, namely checking the data to the same informant with different data collection techniques (Nugraheni, 2014). Data analysis techniques were carried out with interactive techniques, namely (1) data reduction by focusing and simplifying data related to the use of adaptive learning media for children with special needs; (2) data presentation by compiling and presenting relevant data; (3) drawing conclusions in finding research results regarding the use of adaptive learning media for children with special needs. The process of presenting information is done through an elaborative study. With an elaborative study, data obtained from observations, interviews, and other materials that are systematically arranged can be identified so as to produce meaningful information that is able to develop knowledge comprehensively.

RESULT AND ANALYSIS

This study focuses on the use of adaptive learning media used for children with special needs at MI Maarif NU 1 Karangkemiri which is located at Jalan Sindang RT 007 RW 02 Karangkemiri Village, Pekuncen District, Banyumas Regency. The process of teaching and learning activities for children with special needs using adaptive learning media is carried out under the guidance of ABK assistants in collaboration with homeroom teachers. The working principle of using adaptive learning media for children with special needs is patterned on: (1) planning for the use of adaptive learning media; (2) implementation of the use of adaptive learning media; (3) evaluation of the use of adaptive learning media. Based on the research conducted by collecting data, selecting, analyzing, and identifying facts, the results of the research and discussion can be presented as follows:

Planning the Use of Adaptive Learning Media

Kustawan (2013) said that adaptive learning media for children with special needs are essentially media that are designed, created, selected and used in learning so that they can be useful or useful and suitable in learning activities. The selection of learning media adapted to the objectives, needs, materials, abilities and characteristics of children will greatly support the efficiency and effectiveness of the learning process and results.

According to Mais (2016) in planning the procurement of learning media in inclusive education providing schools to suit the subject matter, conditions and potential of students, it is necessary to pay attention to the following criteria:

1. General Criteria

These general criteria include: (1) educational aspect; (2) technical aspect; (3) aesthetic aspect; and (4) effectiveness and efficiency. The educational aspect means that learning media must be in accordance with the applicable curriculum, which must refer to the expected competencies, materials, learning methods and according to the type, level and unit of education as well as the level of child development. The technical aspects include media validity (validity), media size accuracy, media accuracy, security and ease of use, durability and durability as well as clarity of guidelines. Aesthetics concerns shape and color. Attractive and aesthetic (beautiful) shapes and colors will be an attraction for students. No less important, the learning media designed must also be effective and efficient in order to save time, energy and precisely achieve the target or goal. In line with the statement from Mrs. Citra as a companion for children with special needs at MI Maarif NU 1 Karangkemiri, according to her, the curriculum used is a flexible curriculum according to the ability of the child. The media used also adjusts to what material the class teacher wants to convey, which is made easier by using media designed by the companion.

2. Special Criteria

Specific criteria are criteria that are stated in the form of media specifications which usually include the shape, size, material, and color of the learning media that are tailored to the needs of students. The important thing that needs to be considered in planning the procurement of learning media is that it is necessary to analyze the curriculum, especially those related to the expected competencies, learning materials, strategies and methods to be used. In general, the steps in planning the manufacture of media for children with special needs in special or special schools and inclusive schools are as follows: (1) identification of the characteristics and needs of students; (2) Formulation of learning objectives (*instructional objectives*); (3) Formulation of detailed material points; (4) Develop success measurement tools; (5) Writing media; (6) Formulating instruments and tests and revisions (Budianto, et al: 2009).

Before designing adaptive learning media, schools first analyze the classification of children with special needs in order to be able to apply the learning process appropriately. Classification of

disorders of children with special needs according to Davidson, Neale and Kring (2006) consists of attention deficit disorder or hyperactivity, behavior disorders, learning disabilities, mental retardation, and autistic disorders. Meanwhile, according to the Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 157 of 2014 concerning the Special Education Curriculum Article 4 children with special needs can be grouped into: (1) blind; (2) the deaf; (3) speech impaired; (4) mental retardation; (5) quadriplegic; (6) tunaras; (7) learning difficulties; (8) slow learners; (9) autism; (10) Has a motor disorder; (11) become a victim of abuse of narcotics, illegal drugs, and other addictive substances; (12) had other abnormalities.

Based on the results of an interview with the Head of MI Maarif NU 1 Karangkemiri, Mrs. Siti Muntofiqoh, she explained that in the madrasa she led there were (1) children with special needs for mental retardation, namely someone who experienced obstacles to the function of intellectual intelligence and behavioral adaptation that occurred during their development and also caused difficulties in academic, communication and social tasks; (2) children with special needs are hyperactive, namely symptoms that occur due to brain damage, emotional turmoil or mental retardation which makes it difficult to focus; (3) children with special needs have learning difficulties, namely difficulties in processing information, especially in mathematics and linguistic concepts. By analyzing and classifying children with special needs, the media that will be used by both class teachers and assistants will be in accordance with the child's needs.

Implementation of the Use of Adaptive Learning Media

Meimulyani and Cartoyo (2013) describe that the characteristics of learning media for students with special needs are accuracy with learning objectives, and according to students' thinking levels. Based on the results of the interview, this has been applied at MI Maarif Nu 1 Karangkemiri through the use of adaptive learning media.

In dealing with children with special needs for mental retardation, according to Mrs. Citra as an ABK assistant at MI Maarif NU 1 Karangkemiri, she uses media in the form of visual sensory tools, namely Cube gradations (cube shapes with varying sizes to train ability/understanding of size comparison), beam grading 1 (block shapes with varying sizes of one color, cylinder gradations (cylindrical shapes with varying sizes and colors to practice the ability/understanding of cylinder color and size, triangular towers, and puzzles. Besides that, it also teaches how to socialize with other people simply shake hands and ask how they are, because children with mental retardation tend to be closed and difficult to communicate with. According to the explanation from Mrs. Citra As a companion for children with mental retardation, they spend more time in the resource room than in the classroom.

Different media are used for hyperactive children with special needs. According to Mrs. Tyas as the third grade homeroom teacher that hyperactive children in class are feared by their peers because of explosive emotions, cannot focus and often act rudely to others. Adaptive media used is audio visual. A simple example is that hyperactive children with special needs can call the call to prayer, class teachers and ABK assistants get around it by often playing the call to prayer to the child through video recordings, then over time the child will memorize it. Another example on the material means of transportation. To make hyperactive children with special needs understand, the accompanying teacher stimulates the use of media cards containing various types of transportation so that the child is interested and willing to learn. Then to help the child focus by giving him the responsibility of watering the flowers in the madrasa environment every morning.

For children with special needs who are slow to learn, the learning media used are the same as for mentally retarded children, namely visual sensory devices. Based on an interview with Mr. Suhodo as the fourth grade teacher in learning mathematics, the subject of multiplication and division for slow learners is given media in the form of mathematics teaching aids. In addition, every day provides the habit of learning to read and count 15 minutes after the teaching and learning activities in class are over. This activity uses alphabet cards to learn to read and a set of stones to

learn addition and subtraction. Thus, adaptive learning media is very appropriate to use because the media used is according to needs.

Evaluation of the Use of Adaptive Learning Media

To find out whether the learning media used are effective and efficient, it is necessary to conduct a thorough evaluation. In the evaluation, at least 3 (three) related aspects should be considered, namely: (1) Evaluation of learning media, whether learning media are useful for generating students' learning motivation and interaction between students and the environment; (2) Evaluation of the educator (companion), whether the educator (companion) has the ability to convey messages through the learning media they use; (3) Evaluation of students, whether the learning media allows students to learn independently according to their abilities and interests (Mais, 2016).

Based on the results of interviews with assistants for children with special needs at MI Maarif NU 1 Karangkemiri using adaptive learning media is very useful in raising learning motivation for children with special needs. They become enthusiastic and enthusiastic about going to school. In addition, using adaptive learning media makes it easier for class assistants and teachers to convey the aims and objectives of learning. The same thing was conveyed by Azzam who is a hyperactive special needs child who is now in grade 3, according to him, the existence of learning media makes him want to rush to school, studying with a companion is fun because learning while playing so it is not boring. This is reinforced by the opinion of Riyan, a child with special needs with learning difficulties who is currently in grade 4. With the learning media provided by the grade 4 teacher, he understands the learning materials that have been delivered. Now he has memorized the alphabet and little by little he can read even though he is not fluent.

CONCLUSION

Based on the analysis of the data and information collected through the working principle of using adaptive learning media for children with special needs, the pattern is: (1) planning for the use of adaptive learning media includes general criteria and special criteria; (2) implementation of the use of adaptive learning media; (3) evaluation of the use of adaptive learning media. So it was concluded that the results of the study showed that adaptive learning media at the inclusive madrasah at MI Maarif NU 1 Karangkemiri could help children with special needs understand the lesson.

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