Article Title: Literature Study In Numeracy Learning For Children With Special Needs And Policy Alternatives

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Abstract: Conditions in the field show that children with special needs who are blind and slow learners still have many deficiencies in math problems. Therefore, there needs to be an in-depth discussion on this matter. This article will describe the process of teaching and learning arithmetic for students with special needs through article analysis so that later it will be known how to ideally carry out numeracy learning for children with special needs through a policy. This research aims to describe the counting process of teaching and learning of students with special needs. This study uses a systematic literature review method. Data collection was carried out by documenting and reviewing previous articles related to the process of learning numeracy for students with special needs. Articles are searched by searching for articles using the Google Scholar database. Included in the discussion of this learning process are learning methods and models, learning media, and difficulties or challenges faced by students with special needs and teachers in learning numeracy. The final results of the review can be concluded that the process of teaching and learning numeracy between regular students and students with special needs has several differences, including the number of students, the time of delivery of material, and teaching and learning activities. Four alternative policies are proposed: facilitating accompanying teachers, preparing disability-friendly school facilities, collaborating with institutions dealing with children with special needs, and preparing numeracy media.

Keywords: Numeration; Children with Special Needs; Policy

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1. INTRODUCTION

The existence of education is to make humans become progressive individuals who can create something useful for other humans. Humans can contribute to society and the nation with a process of independence through education. In addition, with education, humans can do various things for the welfare of their lives. Therefore, humans are required to learn various things that exist on earth. Not only general science and religious knowledge but also important for studying life sciences. Through this education, it is hoped that humans can develop their potential, which is useful as a provision in daily life so that humans do not always have a dependent nature (Alviyan et al., 2020).

Seeing the importance of education for human life, all humans have the right to get a proper education regardless of the physical shortcomings, strengths, and limitations possessed by a person. The law of the Republic of Indonesia concerning the national education system explains that all citizens are entitled to quality education, and citizens with physical, emotional, mental, intellectual, or social disabilities are entitled to special education. (Imamudin et al., 2021). The basis for the formation of inclusive education is to equalize the rights of students with deficiencies or disabilities with normal students in general in obtaining a proper education to combine the implementation of special education with regular education in the same education unit. (Putri et al., 2019).

Children with special needs (ABK), or what is often called special children, are children who need special treatment because of developmental disorders and abnormalities experienced by children. Regarding the term disability, children with special needs have limitations in one or several physical and psychological abilities. In general, children with special needs can be concluded as children with unique characteristics that are different from children in general without always showing mental, emotional, or physical disabilities. Another term for children with special needs is extraordinary children. Children with special needs or extraordinary children are children who educationally require specific services that differ from other children.

Students with special needs have deficiencies or abnormalities in terms of emotional, physical, intellectual, mental, and different characteristics. They require special treatment and services according to their shortcomings. From the data from the information system for persons with disabilities, in March 2020, there were 197,582 persons with mental disabilities. Meanwhile, according to BPS data for 2018, access to education for people with disabilities is still relatively low; namely, 30.7% of people with disabilities do not finish school up to the secondary education level. Meanwhile, only 17.6% of the total number of persons with disabilities have successfully graduated from tertiary institutions. BPS also stated that employment for disruptions in the 2016-2019 period only grew by 49%. In addition, based on the 2018 Education Statistics, the proportion of the population aged five years and over with
disabilities who are still in school is only 5.48 percent. Persons with disabilities who have not appeared or have never appeared reached 23.91 percent, and persons with disabilities who did not appear again were 70.62 percent.

Regulation of the Minister of National Education of the Republic of Indonesia number 70 of 2009 concerning Inclusive Education for Students in Article 3 it is stated that it includes children with special needs, including blind children, children with physical disabilities, mentally disabled children, slow learners, speech impaired children, deaf children, visually impaired children, children with learning difficulties, and children who have motor disorders. In this case, the author will discuss learning mathematics for blind children and slow learners.

According to data from the Indonesian Ministry of Health in 2017, the number of blind people in Indonesia is as much as 1.5% of the entire Indonesian population, both blind and visually impaired. There are two different types of blind people, namely partial blindness and total blindness. Blind students have limited vision but can use both hands to write or read braille books. Blind students have no limitations on their minds. So that in terms of emotional and mental visual impairment, students are more stable than autistic students or students with motor disorders (Yuliana et al., 2019). Kohanova (Jitanti & Kurniasih, 2021) mentions that some of the difficulties or limitations that arise in blind students in learning mathematics are as follows: 1) generalizing – finding the similarities in exclusive sports in ordinary existence, 2) translating sports and moves into mathematical language, 3) missing flexibility in trouble fixing and in calculations, dan 4) translating and transferring three-dimensional objects into two-dimensional iconic forms. Thus, to explain concretely abstract mathematical material to blind students and make it easier for students to understand learning material, learning media is needed in classroom practice that can be touched and contains braille letters.

Slow learners are a condition of someone with intellectual potential below the average normal person, which causes a person to be slow in learning material in the process of teaching and learning activities. Slow learners need a little longer time to understand the lesson compared to other normal students. Slow learners are not the same as autistic children who experience mental retardation, but in achieving academic success, they have a slower rate than students in general or normal students. Slow learners have an IQ between the 70-85 range or the 75-89 range. So that in general, the intellectual potential of slow learners is in the range of 70-90 (Krishnakumar et al., 2011). Slow learners are more likely to have social and academic problems. In academics, slow learners need a long time to understand the subject matter, especially in numbers, concepts, and language skills. In addition, slow learners’ challenges in teaching and learning activities are cognitive abilities, weak memory, emotional and social problems, and lack of concentration or focus on the learning material. Meanwhile, in terms of society,
slow learners tend to be less confident because of their cognitive limitations, where their cognitive abilities are very different from normal students in general. Therefore, slow learners need a little longer time to learn and understand the material being explained by the teacher compared to normal children in general. They should practice more questions than memorizing and remedial activities.

Based on Donnell (Barbra & Joyline, 2014), preparation for learning that takes into account the individual needs of students with special needs and regular students is more important than learning outcomes. In line with that statement, (Arafah, 2008) states that schools are required to teach mathematics, and students must learn mathematics. Inclusive schools must also continue to teach mathematics. Still, the material presented to each student with special needs may not be in harmony between one individual and another, depending on the student's condition. This research will complement the research that has been done before (Kadarisma & Juandi, 2021; Sabaruddin et al., 2020; Ulva & Amalia, 2020); this research will add information that the urgency in this research appears to be about describing the numeracy learning of school students with special inclusion needs. The lead teaching numeracy in this article includes the learning process, the learning media used, as well as the challenges or difficulties of students with special needs in learning numeracy.

2. METHODS

In this writing, the author reviews, identifies, and interprets previous studies through selected articles. Using this method, the researcher reviews and identifies articles from journals in a structured manner, in which each process follows the steps that have been set (Nightingale, 2009). Therefore, the author uses the google scholar database to find and collect the articles studied. The keywords in the article search were learning mathematics, blind, slow learners, inclusive education, and children with special needs. From the researcher chose thirteen article scholars in this study from the many articles in the google scholar database search in the next section. The article will provide information about the ideal conditions for learning numeracy for children with special needs. The article is used as review material for writing this article, where the selected article is closely related to the keywords used.

After selecting the articles from the research conducted by the researchers, the next step is to group the selected articles by grouping the learning outcomes and learning processes for students with special needs, namely blind and slow learners, and the learning media used in learning. The grouping of these articles is then tabulated in a table that includes the author's name, title, year of publication, journal name, type of research, and research results.
Table 1. Article data used

<table>
<thead>
<tr>
<th>Discussion</th>
<th>Writer</th>
<th>Title</th>
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<tbody>
<tr>
<td></td>
<td>(Rahmawati, 2018)</td>
<td>Learning Mathematics for Adolescent Students with Special Needs in Inclusive Schools</td>
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<tr>
<td></td>
<td>(Saleh et al., 2017)</td>
<td>Learning Mathematics for Children with Special Needs Type Slow Learners</td>
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<td></td>
<td>(Hasibuan et al., 2020)</td>
<td>Profile of Mathematics Learning for Children with Special Needs Variety of Slow Learners in Inclusive Classes at Garuda Cendekia Junior High School Jakarta</td>
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<tr>
<td></td>
<td>(Suherman &amp; Seputri, 2019)</td>
<td>Declarative Knowledge of Blind Students in Mathematics Learning</td>
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<tr>
<td></td>
<td>(Febriyanti &amp; Nugraha, 2017)</td>
<td>Difficulties in learning mathematics in inclusive schools for children with special needs</td>
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<tr>
<td></td>
<td>(Irawan &amp; Febriyanti, 2018)</td>
<td>Application of Learning Methods for Slow Learners (Case Study at Wirosaban Inclusive Elementary School Yogyakarta)</td>
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<tr>
<td></td>
<td>(Permatasari et al., 2017)</td>
<td>Ability to Associate Problems with the Story “Opportunities” for Blind Students Through Guided Discovery Method</td>
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<td></td>
<td>(Manikmaya et al., 2021)</td>
<td>Single Subject Research: Comparative and Value-Based Learning with Contextual and Learning Approaches for Slow Learners</td>
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<td>Development of Puzzegi (Fquad Puzzle) as a Media for Learning Mathematics for Blind Students</td>
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<td>(Rindiani &amp; Irdamurni, 2019)</td>
<td>Blokjes Media to Improve Operation Ability to Count Blind Children</td>
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<tr>
<td></td>
<td>(Prasetyawan &amp; Masitoh, 2020)</td>
<td>Developing The Mathematics Learning Strategy Book For Blind Students In Junior High School</td>
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</table>

The final step taken by the researcher is to review and analyze the article using learning theory and interactive learning. At the end of the research, the thing to do is to compare the research results in the articles and draw conclusions. The conclusions formed in this literature review will then be adjusted to what policies have been carried out by the government. The researchers also provide alternative policies related to this problem.

3. FINDING AND DISCUSSION

Numeracy Learning Process for Students with Special Needs

Numeration is one of the subjects that are quite difficult for children with special needs. This subject is a subject that must be given at all levels of formal education. Learning in inclusive education schools
that provide services for children with special needs, such as slow learners, is no exception—seeing the reality that counting is included as a subject that is considered difficult and less favored by some students. Students’ distaste for mathematics can have an impact on student learning success. Special accompanying teachers with competence in special education must carry out the process of learning mathematics.

The following are the results of a review of articles about the process of learning mathematics.

<table>
<thead>
<tr>
<th>Researcher and Year</th>
<th>Article Title</th>
<th>Journal Name</th>
<th>Research Conclusion</th>
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</table>
| (Hadi, 2016)       | Mathematics Learning Process for Slow Learners | Premier Educandum | This study aims to describe the process of learning mathematics for slow learners, including lesson planning, evaluation, and follow-up. The conclusions of this study are:  
  a. The teacher prepares learning tools such as lesson plans, syllabi, media, and learning origins before the learning process.  
  b. In the learning process, there are three stages, namely the introductory term, the core stage, and the epilogue stage  
  c. The terms of assessment and follow-up are in the form of remedial learning, enrichment programs, and counseling services for students who have difficulty  
  d. The challenge in the learning process is that students can lose enthusiasm or interest in the task, and as a result, they refuse to continue the work given |
| (Rahmawati, 2018)  | Learning Mathematics for Adolescent Students with Special Needs in Inclusive Schools | Indonesian Journal of Mathematics Education | This research is qualitative descriptive research with a field study research strategy (field research). This study aims to analyze the mathematics learning of students with special needs at the high school level. The results of this study are:  
  a. The planning stage of learning mathematics for students with special needs is prepared by a special supervisor teacher with considerations given by clinical psychologists and mathematics teachers  
  b. Mathematics teachers and particular supervisors accompany the learning process of students with special needs.  
  c. In the evaluation stage of learning mathematics for students with special needs with limited academic ability, a decrease in the level of difficulty of the questions was carried out; meanwhile, students with special needs |
who did not have prominent academic limitations did not decrease the level of difficulty of the questions. The questions for students with special needs are the same as those for regular students.

This research is descriptive research with a qualitative approach. This study aims to gather information about implementing mathematics learning in inclusion classes. The conclusion from this study is that the process of learning mathematics in the inclusion class goes through three stages (the learning planning stage, the learning implementation stage, and the evaluation and follow-up stage). At the lesson planning stage, the mathematics teacher prepares lesson plans, syllabus, media, and learning resources, while the special supervising teacher prepares learning media, learning resources, and slow learners. The mathematics teacher prepares slow learners psychologically and physically during the learning implementation stage. At this implementation stage, the mathematics teacher tells the material to be studied, asks questions about previous material, and explains the learning objectives and basic competencies. Furthermore, the mathematics teacher will explain the material to slow learners. At the end of the implementation, slow learners and the mathematics teacher make a summary or conclusion of the material. In this case, the math teacher assesses all students and provides feedback. Meanwhile, special supervising teachers are tasked with explaining the material to slow learners and assessing slow learners. In the evaluation and follow-up stages, the mathematics teacher presents lesson plans for the next meeting and gives assignments to slow learners. The special supervising teacher also conveys the lesson plans for the next meeting to slow learners.

This study uses a qualitative approach to describe, express and describe the process of learning mathematics in slow learners. This study produces a profile of slow learners' mathematics learning in inclusive classes, namely:

a. The curriculum for slow learners is the same as for regular students, with additional curriculum adaptations in the form of modifications.

b. The learning methods and models applied to slow learners are the same as regular students.

<table>
<thead>
<tr>
<th>(Saleh et al., 2017)</th>
<th>Learning Mathematics for Children with Special Needs Type Slow Learners</th>
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<td>Math Didactic</td>
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<th>(Hasibuan et al., 2020)</th>
<th>Profile of Mathematics Learning for Children with Special Needs Variety of Slow Learners in Inclusive Classes at Journal of Medives: Journal of Mathematics Education</th>
</tr>
</thead>
</table>
Garuda
Cendekia
Junior High
School
Jakarta

without the preparation of individual
education programs. However, in practice,
they still pay attention to the characteristics of
slow learners.
c. Evaluation activities are in the form of written
tests which are prepared directly by subject
teachers and then made adjustments by special
supervisors based on modified models

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(Suherman & Seputri, 2019)

Declarative Knowledge of Blind Students in Mathematics Learning

This research is qualitative. This study concludes
that blind students can carry out declarative
knowledge in the form of:

a. Remembering important information in
learning
b. Can present information in their language
c. Can compare and contrast concepts
d. Knowing the difficulties in learning
e. Knowing learning strategies
f. Knowing learning resources
g. Knowing the purpose of the question

(Febriyanti & Nugraha, 2017)

Difficulties in learning mathematics in inclusive schools for children with special needs

This research is an exploratory, descriptive qualitative research using an experimental survey
method without giving special treatment to the research sample. The conclusions of this study are:

a. The character of children with special needs is
different. Children with slow learners need
easy learning techniques so that they can easily
understand the learning material
b. Some factors make children with special needs
in inclusive classes have difficulty learning mathematics. Like moderate and low autistic
children, they need continuous repetition of
material understanding
c. The solutions offered to overcome the
difficulties of learning mathematics in inclusive classes are by making teaching
materials suitable for children with special
needs according to the type or characteristics of students by paying attention to the
difficulties faced by children with special
needs.

The learning process is an interaction between students and teachers in teaching and learning
activities in a room that has been prepared in such a way as to achieve learning objectives. In this
learning process, the teacher first designs or makes learning tools such as lesson plans, syllabi, learning
media, and annual and semester programs. The learning process is an educational interaction or a form
of interaction to achieve learning objectives (Puspitarini & Hanif, 2019). The learning process is a
systematic process that goes through the stages of design, implementation, and evaluation (Edelson, 2002).

In learning theory, an interactive learning model is a method or learning technique that is used by the teacher when presenting lesson material where the teacher plays the leading role in creating interactive educative situations, namely interactions between teachers and students, students and students and with learning resources in supporting the achievement of goals. Study. In teaching and learning, students must be involved in totality, which involves the mind, sight, hearing, and psychomotor (skills, one of which is while writing). In the teaching process, a teacher must invite students to listen, present media that can be seen, and provide opportunities to write and ask questions or responses so that creative dialogue shows an interactive teaching and learning process (Sumiyati, 2017).

The learning process in the inclusive class has three stages: design, implementation, and evaluation. The learning process in the inclusive class is slightly different from the regular class. In a regular class, the maximum number of students in one class is 20 students, but in an inclusive class, there are a maximum of 7 students in one class. In an inclusive class, the number of students in one class is within the maximum limit, then teaching and learning activities cannot be carried out. In other words, the learning process needs to run better. In addition to teaching and learning activities, two supervising teachers are in the inclusive class. The first is the subject teacher, who will provide the material, and the second is the special supervisor teacher, who will direct and help students with special needs understand the learning material. In slow learners, teaching and learning activities take a little longer than in regular students because slow learners need help understanding the learning material in a short time. It takes repeated understanding so that slow learners can really understand the material that the teacher has delivered.

**Learning Methods Applied for Students with Special Needs Types of Blind and Slow Learners**

In the process of learning mathematics for students with special needs, it is important to choose a learning method that is considered effective and in accordance with the characteristics of these students. Learning methods cannot be directly applied to students with special needs. The teacher must first analyze the appropriate learning methods to be applied. This selection will depend on the learning style and the material presented by the teacher. Each learning method has different characteristics. The following results from a review of articles related to learning methods for students with special needs for blind and slow learners.
<table>
<thead>
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<tr>
<td>(Irawan &amp; Febriyanti, 2018)</td>
<td>Application of Learning Methods for Slow Learners (Case Study at Wirosaban Inclusive Elementary School Yogyakarta)</td>
<td>Naturalistic</td>
<td>This type of research is descriptive research with a qualitative approach. The result of this research is that the learning method applied is the lecture method, question and answer method, and discussion with demonstration. In the learning method for slow learners, there are modifications with additional time and additional special assignments as a follow-up. In addition, teachers are required to be more creative in developing methods in accordance with the characteristics and needs of students in inclusive education.</td>
</tr>
<tr>
<td>(Permatasari et al., 2017)</td>
<td>Ability to Associate Problems with the Story 'Opportunities' for Blind Students Through Guided Discovery Method</td>
<td>Ortopedagogia</td>
<td>This study uses a single-subject research approach with an A-B-A-B research design. This study concludes that the guided discovery method is considered effective for increasing the ability to associate or reason about story questions on the material of opportunity. This increase can be seen from the decrease in the frequency of question errors and the increase in student acquisition compared to the implementation of the intervention.</td>
</tr>
<tr>
<td>(Manikmaya et al., 2021)</td>
<td>Single Subject Research: Comparative and Value-Based Learning with Contextual and Learning Approaches for Slow Learners</td>
<td>Journal Of Honai Math</td>
<td>This study uses a single-subject research method with an A-B research design. After the slow learners were given treatment, it could be seen that there was an increase in the student's ability score on the comparison material of worth and reversed value. This can be seen from the score after being given treatment and before being given treatment. The average score of students before being given treatment was 32, while after being given treatment, the score of students increased by an average of 78.</td>
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Included in the learning component are the objectives, materials, methods, and tools, as well as the assessment of the teaching methods used by the teacher almost nothing is wasted because these methods bring results shortly or in a relatively long time (Tsagari et al., 2018). The results that are felt
shortly are said to be direct impacts (instructional effects). In contrast, the supposed results over a relatively long time are called nurturing effects, which usually relate to attitudes and values. In the process of teaching and learning activities, subject teachers have steps or methods that can be applied in the classroom to make it easier for students to understand the material. These steps or methods are commonly known as learning methods. The learning method is a systematic way of working to facilitate the implementation of learning activities in order to achieve the desired learning objectives (Ilyas & Syahid, 2018).

**Learning Media for Students with Special Needs for Blind and Slow Learners**

Mathematics is one of the subjects that must and is important for all students to learn because basic things in everyday life require mathematics, such as calculations in buying and selling. In addition, mathematics needs to be delivered by teachers and studied by students to improve mathematical, analytical, creative, critical, and logical abilities. According to students, mathematics is a difficult and tedious subject (Ulva & Amalia, 2020). The difficulty in understanding mathematics lies in need for students’ ability to imagine so that students cannot understand and work carefully on problems in mathematics. Knowing this urgency, mathematics lessons need to be delivered with good concepts and in a way that is easy for students to understand so that it can be a provision for students in everyday life.

The following article discusses mathematics learning media for students with special needs.

<table>
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<th>Research Conclusion</th>
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<tbody>
<tr>
<td>(Rumantinigsih et al., 2019)</td>
<td>Overcoming the Difficulties of Learning Mathematics in Blind Students Through the Development of Braille-Coded Pandikar Media</td>
<td>Fibonacci</td>
<td>This type of research is Research &amp; Development (development research). The development model is ADDIE, which goes through five stages: the analysis stage, the design stage, the development stage, the implementation stage, and the evaluation stage. The result of this research is a Braille-coded Cartesian Coordinate Board (PANDIKAR) learning media for blind students with the following results: a. The validity test results are with a score of 4.85 which means this media is very valid b. The result of the practicality test with a score of 4.375 means this media is very good and practical c. The student response rate is very positive, with a percentage of 90.625%</td>
</tr>
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</table>
d. Student evaluation test results reach KKM
So it can be concluded that the development of braille-coded PANDIKAR media is feasible and can be used as an alternative mathematics learning media for learning Cartesian coordinate material for blind students.

<table>
<thead>
<tr>
<th>(Kurniasih et al., 2016)</th>
<th>Development of Puzzegi (Fquad Puzzle) as a Media for Learning Mathematics for Blind Students</th>
<th>Proceedings of the Mathematics and Mathematics Education Seminar</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Rindiani &amp; Irdamurni, 2019)</td>
<td>Blokjes Media to Improve Operation Ability to Count Blind Children</td>
<td>JUPPEKhu (Jurnal Penelitian Pendidikan Kebutuhan Khusus)</td>
</tr>
<tr>
<td>(Prasetyawan &amp; Masitoh, 2020)</td>
<td>Developing The Mathematics Learning Strategy Book For Blind Students In Junior High School</td>
<td>Daya Mathematics</td>
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</table>

This research is development research using the ADDIE procedure, which goes through five stages: analysis, design, development, implementation, and evaluation. This research resulted in a learning media that has been developed, PUZZEGI, which contains puzzle components and braille letters. Limited trials on blindfolded subjects showed that this medium was functional and could be used in data structure materials, both for recognition, definition, and properties of plane figures.

This research is classroom action research. This research applies block media to blind students to calculate students’ arithmetic operations ability. The result of the research is that block media can improve the ability of mathematical arithmetic operations to add down a series. The process of giving action in this study went well, as evidenced by the increasing student test results.

This research is a research and development research using the development model of Borgh Gall. This research is the development of a mathematics learning strategy book for blind students. The mathematics learning strategy book for blind students was developed through scientific stages: research and data collection, planning, initial product development, limited trial, product revision, and dissemination. This developed book meets the valid criteria in an outstanding category based on the results of the expert validation test and meets the practicum criteria in a good category based on teacher and student assessments.

Learning media is very necessary to assist the process of teaching and learning activities, especially for students with special needs. Blind students have visual impairments, while mathematics is an abstract material that cannot be understood by listening alone. Mathematics learning needs to be.
delivered with something concrete so that there is no misperception for blind students. Likewise, slow learners have learning difficulties in understanding abstract concepts, low learning motivation, and need a little longer time to understand the material and need repetition of material. Therefore, learning media is critical for learning mathematics, especially in teaching students with special needs, such as blind and slow learners.

In delivering mathematical material with good and interesting concepts, it is necessary to use a tool, namely learning media. Learning media are all things used to convey information in teaching and learning activities so that students can understand the learning material and stimulate students interest in learning. Learning media can be used to create natural, effective, and interesting learning conditions. So that students can see contextually the material presented by the teacher. By using learning media, abstract material can be delivered clearly. That way, the learning media is very important in supporting the process of teaching and learning activities.

Policy recommendations that can be given to education providers

Data on children with special needs has increased every year (Pusparisa, 2021). If there are no clear regulations in each region, it will undoubtedly create a gap between normal students and students with special needs. It is possible that students with special needs cannot get their rights like normal children.

Students with special needs have the same rights. They must recognize literacy, numeracy, and the introduction of technology in their lives. The government's policies regarding independent learning provide flexibility for teachers to explore students' abilities, especially in the fields of arithmetic or mathematics. Students with special needs have the same rights. They must recognize literacy, numeracy, and the introduction of technology in their lives. The government's policy regarding independent learning gives teachers the freedom to explore students' abilities, especially in the realm of numeracy or mathematics. Several alternative policies can be provided to provide access to students with special needs in order to obtain equal rights:

1. Providing facilitation of accompanying teachers for children with special needs

   The existence of accompanying teachers for children with special needs is a must. Schools cannot refuse if there are students with special needs to register. This is indeed adjusted to the existing rules in their respective regions. For example, the Ponorogo district must accept a student with special needs enrolling at their school. This is in the Ponorogo Regency Regional Regulation number 53 of 2016 concerning the implementation of inclusive education in Ponorogo Regency. Article seven stated that in every PAUD and school that organizes inclusive education, at least accommodate/allocate a
minimum of 1 (one) student with special needs and a minimum of 5 (five) students in one study group and may not have more than 2 (two) disabilities.

2. Prepare disability-friendly school facilities

Providing proper facilities for children with special needs is the obligation of schools, especially those with inclusive schools. Even so, regular schools must also prepare if children with special needs register at their schools. If teachers are not specialists in children with special needs, regular schools are required to cooperate with authorized institutions such as special schools. The form of cooperation is that teachers in special schools will visit and assist schools at least once a month.

3. Collaborate with institutions dealing with problems of children with special needs

Collaboration is the main thing when regular schools are unable to provide facilities that suit the needs of children with special needs. The facilities referred to are not only about infrastructure but also include learning book facilities, curriculum, and the presence of teachers and health workers who can control students’ conditions.

4. Preparing mathematical media for children with special needs at school

Mathematics is very important and becomes the basis for learning. Learning to count, multiply, divide, add, and subtract is very important during activities outside of school. Therefore, the preparation of appropriate media to provide learning to students with special needs must be carried out. Schools can ask for grants from the government or cooperate with schools that serve children with special needs.

4. CONCLUSION

The results of the analysis of the articles that have been carried out show that the learning process for students with special needs of various types of blind and slow learners has differences, namely in learning activities which lie in the number of students in one class, the supervising teacher in class, and the time of learning. Furthermore, the use of media and learning methods significantly affects the learning success of students with special needs. By applying efficient learning methods and learning media, students with special needs who are blind and slow learners can improve students understanding of mathematics, especially abstract material. In the process of learning mathematics, students with special needs of various types who are blind and slow learners need tools to understand learning material in the form of learning media. Therefore, the development of learning media for students with special needs is beneficial in teaching and learning activities. Based on the analysis of these problems, there are four alternative policies proposed to the government and foundations
managing educational institutions, namely facilitating accompanying teachers, preparing disability-friendly school facilities, collaborating with institutions that deal with children with special needs, and preparing math media for children with special needs at school.

REFERENCES


