Scaffolding to Help Numeracy Literacy Mild Mental Retardation Children on The Introduction of The Value of Money

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Abstract

The existence of ABK (Children with Special Needs) in inclusive schools still requires assistance from accompanying teachers. However, the limited number of accompanying teachers causes the learning process of ABK to be not optimal, including in improving numeracy literacy skills regarding the introduction of the value of money. Therefore, this study aims to assist in the form of scaffolding for mild mental retardation who attend inclusive schools at SMP N 1 Salatiga in the 2022-2023 academic year. Research begins with identifying initial capabilities, types, and causes of errors followed by implementation scaffolding right. This qualitative research data collection technique includes test methods, interviews, and documentation with a method and time triangulation process. The results showed that the subject experienced misunderstanding, transformation, and process skills. The same type of error, with different causes, can result in different scaffolding given. Scaffolding that succeeds in helping Mild Mental retardation in recognizing the value of money is level 1 (Environmental Provisions), level 2 by type Explaining and Restructuring as well as Scaffolding level 3 (Developing Conceptual Thinking).

Keywords: ABK; Scaffolding; The Value of Money; Numeracy Literacy.

Abstrak

Keberadaan ABK di sekolah inklusi, tetap memerlukan pendampingan dari guru pendamping. Akan tetapi, terbatasnya jumlah guru pendamping menyebabkan tidak optimalnya proses belajar ABK termasuk dalam meningkatkan kemampuan literasi numerasi akan pengenalan nilai uang. Oleh karena itu, penelitian ini bertujuan untuk memberikan bantuan berupa scaffolding terhadap Tunagrahita Ringan yang bersekolah di sekolah inklusi SMP N 1 Salatiga pada TA 2022-2023. Penelitian dimulai dari pengidentifikasian kemampuan awal, jenis dan penyebab kesalahan yang dilanjutkan dengan pengimplementasian scaffolding yang tepat. Teknik pengumpulan data penelitian kualitatif ini mencakup metode tes, wawancara dan dokumentasi dengan proses triangulasi metode dan waktu. Hasil penelitian menunjukkan bahwa subjek mengalami kesalahan pemahaman, transformasi dan keterampilan proses. Jenis kesalahan yang sama, dengan penyebab yang berbeda, dapat mengakibatkan perbedaan scaffolding yang diberikan. Scaffolding yang berhasil membantu Tunagrahita Ringan dalam mengenal nilai uang adalah level 1 (Environmental Provisions), level 2 dengan jenis Explaining dan Restructuring serta Scaffolding level 3 (Developing Conceptual Thinking).

INTRODUCTION

In Law No. 20 of 2003 concerning the National Education System, article 5 section 1 reads: "Every citizen has the same right to obtain quality education". Furthermore, in section 2 it is stated that citizens who have physical, emotional, mental, intellectual, and/or social disabilities have the right to obtain special education. This means that the government is obliged to provide quality education to every citizen, including Children with Special Needs or often referred to as ABK.

ABK is a child who has limitations or extraordinary abilities, both physical, mental-intellectual, social, and emotional, which significantly influence the process of growth or development compared to other children of the same age (Setiawati, 2020; Winarsih et al., 2013). ABK has been divided into 12 categories and one of them is mental retardation (Ayuning et al., 2022; Kemendikbud, 2014). Mental retardation is a condition where an individual has mental retardation, below the average normal child in general. *American Association on Mental Deficiency* AAMD (Clements, 1984: 11-14) divides mental retardation into three categories, such as Severe mental retardation with an intelligence level of IQ less than 30, moderately mental retardation with an intelligence level of IQ ranging from 30-50, and mild mental retardation with an intelligence level of IQ ranging from 50-70.

In Indonesia, ABK can get education through special schools or inclusive schools. Inclusive schools allow students with special needs, including students with the mild mental retardation category recommended by doctors/psychologists to study with regular students. (Irdamurni, 2015).

The existence of an inclusive school aims to provide equal opportunities for every child to get an education regardless of the child's condition (Permendiknas, 2009). Nevertheless, problems or obstacles are still found in the learning process for ABK in inclusive schools, one of which is the limited number of accompanying teachers (GPK) for ABK (Nisa, 2016) and also the perception and understanding of teachers in assisting ABK in inclusive schools. (Efendi et al., 2022; Kubat, 2018). This problem also occurs at SMP N 1 Salatiga. As an inclusive school, in the 2022/2023 Academic Year has two students with special needs, one in the Slow Learner category and the other with Mild Mentally Retartdation. Assistance with ABK in the learning process cannot be carried out optimally due to the absence of the class accompanying teacher (GPK). Schools have managed to involve local authorities, but due to the limited number of companion teachers in Salatiga, GPK cannot routinely assist. This resulted in the

learning process of students with special needs in inclusive schools not being optimal, including in learning mathematics. Therefore, it is necessary to assist so that students can improve their mathematical abilities, especially numeracy literacy.

Numeracy literacy is the ability to apply number concepts and arithmetic operations skills in everyday life and the ability to interpret quantitative information around us (Kemendikbud, 2017:3). This ability includes daily abilities such as shopping ability, counting, distance or time, land area, and so on (Baharuddin et al., 2021). One example of numeracy literacy is the ability to value money. The numeracy skills regarding the value of money are also essential for ABK to master (Zuhdi, 2019). Mastery of these abilities can increase the independence that students with special needs have, especially in carrying out daily activities such as during the shopping process to determine the amount of money to pay, determine the amount of change that can be received, etc.

Several studies have been conducted to help ABK students improve their numeracy literacy regarding the value of money. Among them, research by Kusumadewi, (2016) helps the ABK category with mild mental retardation using a shopping learning model in the canteen, and research by Sugino, (2013) also helps ABK with mild mental retardation category by playing a role. Another form of assistance that can be used to assist ABK in learning mathematics is scaffolding.

Scaffolding is assistance specifically made to construct students' abilities, and this assistance can be reduced when it is no longer needed by students (Lindstrom & Sharma, 2011). In line with this, scaffolding is also interpreted as assistance to make a student who is initially unable to complete the task, but in the end will be able to complete the task independently (Maybin *et al*, 1992). Sudrajat (Damayanti, 2016) mentioned scaffolding as systematic assistance according to the conditions of the party being assisted. Moschkovich, (2015) mentioned scaffolding in the form of guidance from adults that refers to one aim by paying attention to time, theory, and concepts.

Several studies have shown how scaffolding can help students with special needs. Among them research by Susilo & Prihatnani, (2022) which applied scaffolding to ABK in the slow learner category for material on integer operations, research of Mahsusiyah, (2014) which applied scaffolding to ABK in the category of Moderate Mentally Retardation for the ability of worship procedures.

Many guidelines can be used as references in providing scaffolding to students, one of which is scaffolding according to Anghileri theory. Anghileri (Kusmaryono et al., 2020) divided scaffolding into 3 stages, such as Environmental Provisions in stage 1. Assistance prepared by the teacher is preparing the student learning environment (classroom organization). Stage 2, Explaining, Reviewing, and Restructuring in which the teacher (aid provider) and students (assisted party) are directly involved in an interaction. The intended forms of interaction include explaining the material, conveying concepts, reviewing, and rebuilding to simplify something abstract so that it can be understood by students. Stage 3, which is the last scaffolding provision according to Anghileri is Developing Conceptual Thinking, namely the interaction between teachers and students aimed at developing conceptual thinking by creating opportunities to express understanding for students and teachers.

This type of scaffolding has proven helpful for students with special needs in increasing numeracy literacy. Research

results by Jannah et al. (2019) showed that Anghileri Scaffolding has succeeded in helping students with special needs who experience difficulties in numeracy skills related to number line material.

As well as research by Susilo & Prihatnani, (2022), this research assists ABK in the form of Scaffolding. However, this research focuses on assisting children with special needs in the mild mentally retarded category, not slow learners like research by Susilo & Prihatnani, (2022), this is because it is the ABK category with mild mental retardation who have not mastered numeracy regarding the value of money. In addition, the scaffolding stages that will be used are based on the Anghileri theory because this theory has stages with various alternative assistance. It is hoped that by analyzing the numeracy ability they already have and identifying the inadequacies of ABK, this research can provide the right scaffolding to help ABK to have special numeracy ability related to the value of money. Thus, it is expected that the ABK can have numeracy literacy ability related to the value of money.

METHODS

This research was conducted at SMP Negeri 1 Salatiga, an inclusive school with the research subjects being students with special needs in the mild mental retardation category in the 2021/2022 academic year and registered as class IX students at the school.

This study aims to describe the subject's initial ability (namely students with special needs) regarding the value of money, explore how the thinking process of ABK can be used as the basis for providing scaffolding assistance, and explain how the impact of providing scaffolding has on the subject's ability to the value of money. To achieve the research objectives, qualitative research was carried out,

because the focus of the research was to explore the inability of students with special needs in the mild mental retardation category who attended an inclusive school regarding the competence to recognize the value of money, followed by how to provide the right scaffolding, the method chosen in this study was case study method.

The stages in this study were: 1) looking for research subjects with the criteria of students with special needs in the mild mental retardation category who attend inclusive schools who have not mastered numeracy literacy regarding the value of money, 2) exploring the mastery of numeration in the value of money from the selected subjects (identifying abilities, disabilities and way of thinking), 3) designing and implementing forms of assistance (activities/media) that can be provided at each stage of Scaffolding Anghileri according to the needs of the subject, 4) analyzing the impact of providing Scaffolding on the subject's numeracy ability on the value of money.

The data collection process was carried out in a natural setting with data collection techniques emphasizing participant observation techniques (researchers involved themselves to be able to make more in-depth observations), interviews, and test methods.

The technique of checking the validity of the data in this study used several validity tests as follows: 1) Credibility test using the triangulation technique to analyze the credibility of the data in the field and what is reported. Triangulation technique (with three different data collection methods) as well as time triangulation (due to data matching from the data collection process in different periods). 2) The transferability test with the results of this study can later be used as a reference or guide in the process of analyzing the errors of students with special needs and

the process of compiling the Anghileri scaffolding for children with mild mental retardation. 3) The dependability test was achieved in this study by 1) observation acuity (based on the researcher's mastery of the theory of the characteristics of students with special needs in the mild mental retardation category, and mastery of material indicators of the value of money, and mastery of scaffolding theory according to Anghileri), 2) analysis process of interview transcripts and video documentation (results from interviews and participant observation processes that occur naturally). 4) Confirmability test with the preparation of research instruments (knowledge test questions, interview transcripts, scaffolding transcripts, classifying errors) was carried out by researchers under the guidance of supervisors who were then verified by two subject lecturers and two related teachers. Furthermore, the research results were processed by researchers with the guidance of lecturers and verification of research results by subject tutors and examiner lecturers.

The data analysis technique used in this study is data reduction, data presentation, and conclusion. In the data reduction process, the researcher categorizes the data, edits the data, and summarizes the data so that the data can be simple than the data obtained during the research. The data analyzed are all learning outcomes in the form of the results of the questions that have been given, interviews, and documentation. After reducing the data, the next thing is to present the data in the form of research results tables which include question indicators, initial abilities, error indicators, the scaffolding stages given and the actions given, and the results. The final stage in the data analysis process is concluding the data.

RESULTS AND DISCUSSIONS

Research Result

Subject Initial Ability

To provide the right scaffolding, data collection and analysis were carried out on the subject's initial abilities. The results of this analysis indicate that the subject can **read**. However, they still have difficulty in **understanding**. This can be seen from the inability of the subject to understand the instructions on the questions. The Subject's inability to understand the questions is also due to the Subject's limitations in understanding the meaning of several terms contained in the instructions, such as the terms "spell out" and "nominal". This inability is classified as a misunderstanding (comprehension).

On that basis, assistance is provided in the form of work examples for each type of question (Figure 1).
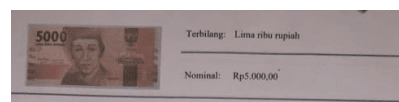

Figure 1. Example of work

This assistance belonged to level 1 scaffolding, namely Environmental Provisions. At this level, the researcher prepared the form of the exercise in such a way that it could help the subject understand the intent/purpose of the problem.

The following is the description of the subject's initial ability, Scaffolding provision, and the subject's final ability in the value of money introduction material.

Indicator 1: "Knowing Types of Money"

Subjects had been able to classify the types of money into paper moneys and coins without having to show actual money. Through the picture of the money given, the Subject was able to classify it into the right type (Figure 2).
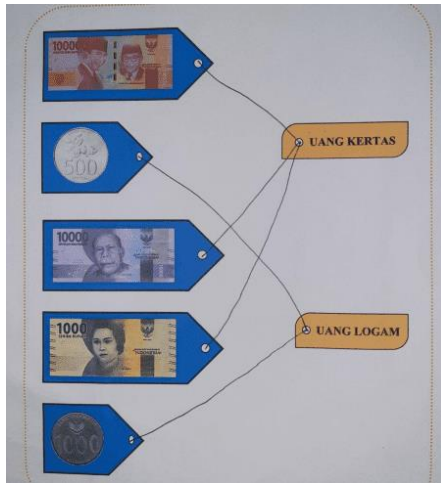
Figure 2. Indicator 1 work results

Indicator 2 "Mentioning and Writing The Value of Money"

The value of money can be expressed in two ways: alphabetical and **nominal**. Alphabetically, the subject could read, mention, and write down the value of money. For example, when the subject saw a figure of a thousand rupiah, they could say and write down the value of the money by reading the information alphabetically (Figure 3).

Figure 3. Information position of money

Nevertheless, the Subject was unable to recognize the value of money because of the inability to mention or write down the value of money when the information about the value of money was removed (Figure 4). This error included the category of transformation. The subject could not transform the information of the value into the form of an alphabet or nominal.

Figure 4. An example of blocking information about money

Therefore, level 2 scaffolding was given with the type of explanation. Explaining was done by providing keywords to give an understanding of the subject regarding the value of hundred and thousand money by providing the following information: 1) there were three zeros (000) which are read thousand 2) while there were two zeros (00) which were read hundreds. This form of keyword did not work when it was just spoken but worked when it was written on the board.

When there were only two zeros, the subject immediately read the leading number and continued with the word hundred. This could be seen when the subject read the two hundred and five hundred money values. As for reading the one hundred, the Subject still read it with one hundred instead of one hundred.

The same scaffolding was given for this type of transformation error, namely by writing the keywords one equal to *use* and the correct and incorrect examples (Figure 5).
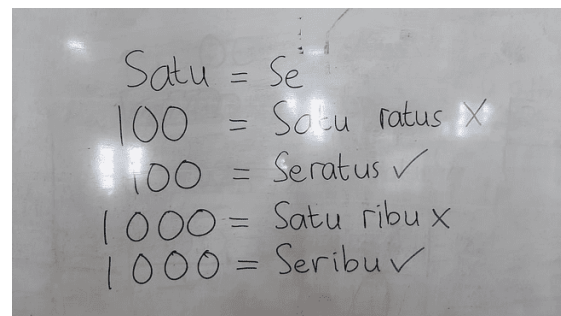

Figure 5. The keyword one is equal to "Se"

Furthermore, in determining the value of money with the types of thousands, tens, and hundreds of thousands, the subject

learned by covering three zeros from be-hind and reading the remaining numbers. For example, when mentioning the value of one hundred thousand, the subject co-vers it with three zeros from the back and reads the remaining uncovered number (one hundred) and added the thousand to make one hundred thousand. (Figure 6).

Figure 6. The process of blocking the zeros

In writing the value, the subject did not have difficulty in writing alphabetically because the subject already has acquired writing skills. Even so, the subject still ex-perienced errors (process skills) using cap-ital letters.
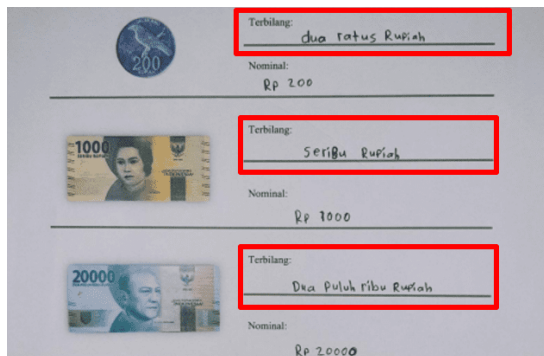
This writing error could be seen in Figure 7.

Figure 7. Writing the value of money alphabetically

Even though there were still errors in the writing process (process skills), this study only focused on mathematical abilities and incorrect writing following Enhanced Spelling (EYD).

In contrast to the ability to write down the value of money alphabetically, the subject still experienced an error in writing the nominal amount of money

even though an example had been pro-vided. This was because the subject had not understood the procedure for using the rupiah symbol and the dot (.) in stating thousands. This could be seen from the subject's answers in (Figure 8). The sub-ject did not add a comma zero-zero (,00) and did not add a sign (.) as a thousand sign.
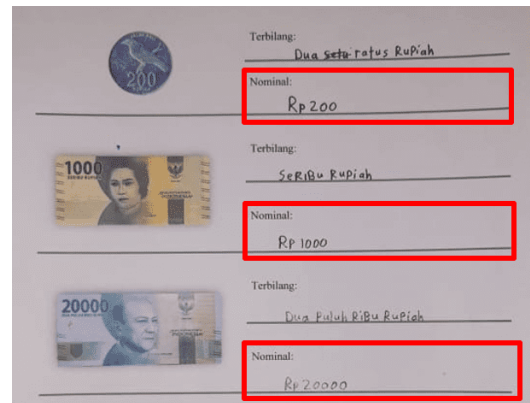

Figure 8. Writing the value of money in nominal

The form of assistance for this type of transformation error was in the form of Scaffolding lv 2, namely Restructuring through the activity of writing values by showing patterns according to the proce-dure of writing values in nominal terms. The patterns used were: 1) write down the value of money based on the picture; 2) put an "Rp" sign in front of the money value and a zero comma (.00) at the end; 3) add a period as a thousand marker (if needed). The period was added after cal-culating the 3 zeros from the end of the dollar amount. Each of these steps was demonstrated using a different colored ink (Figure 9).
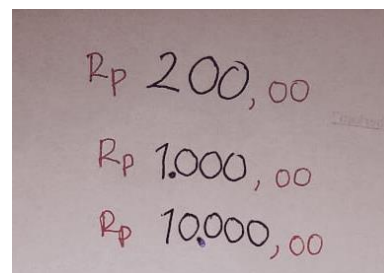

Figure 9. Procedure for writing the value of money in nominal.

Repeatedly, Subjects were asked to practice the procedure also with different colored ink. It was intended to make the subject understand the procedure for nominally writing the value of money. This scaffolding was proven to be able to help in correctly writing the value of money in nominal terms. The correct answers could be seen in (Figure 9).

Figure 9. Nominal correct writing

Indicator 3 "Ordering The Value of Money"

In the indicator of sorting money values, subjects were able to: 1) sort coins from one hundred to one thousand 2) sort one thousand to one hundred thousand paper moneys 3) sort mixed metal and paper money if one thousand notes were paper moneys like (Figure 10)

Figure 10. The sequence of coins and paper money with paper money of a thousand rupiah

However, the subject could not sort it correctly if it contains coins and paper money, especially when there were no thousand paper moneys in it. An example could be seen in Figure 11.

Figure 11. The sequence of coins and paper moneys with a thousand-rupiah coins

The subject always placed ten thousand notes as the first paper money which was arranged after the arrangement of coins. This was due to the Subject's memory that in compiling paper moneys, the first order was money with the first number one so that when there were no one thousand paper moneys, the Subject saw ten thousand as one thousand. This error was included in the Process Skills category.

Due to the incompetence of the Subject, the form of assistance provided was Scaffolding level 3 in the form of a repeat demonstration of sorting money with props starting with the types of coins followed by paper moneys and ending with the combination of the two. When merging with the two, they were given Scaffolding level 2, namely Restructuring by asking the question: "Which money has the same value as this money (the researcher shows a thousand paper moneys)?" The subject succeeded in determining the coin equivalent to a thousand paper moneys by mentioning the value of the money. After the subject understood the similarity in the value of a thousand coins and paper moneys, the subject was asked to sort the money (metal and paper moneys) repeatedly by changing the type of thousand paper moneys. However, this assistance had not been successful. Subjects still experienced failure when there were no thousand paper moneys. The same error was still being made, namely considering the ten thousand as a paper money so that it was placed after the coin. This shows that Process Skill errors were still occurring.

On that basis, level 3 of Scaffolding was given, namely Developing Conceptual Thinking, by reminding the concept of value for money. Subjects were asked to state the monetary value of the money they had arranged. By mentioning the value of the money, the Subject could realize the mistake in the arrangement of money that was made. For example, when the subject was asked to sort the value of money from the smallest. The subject managed to identify the mistake in placing the ten thousand before the two thousand when the subject mentioned the two money values. This was because the Subject already could compare integers where ten was more than two so the Subject could conclude that ten thousand would also be more than two thousand. This checking method was repeated until finally, the subject was able to give the correct sequence. An illustration of this process could be seen in Figure 12.

Figure 12. Checking process in sorting money values.

From this activity, it appeared that the Subject's ability to state the value of money could be used to assist the Subject in sorting money based on its value.

Discussion

The scaffolding award is based on the incompetence and mistakes made by the subject. The identification of subject errors refers to Newman's theory of error analysis (Murtiyasa & Wulandari, 2020; Rohmah & Sutiarso, 2018) which is grouped into 5 types of errors, namely errors in reading, comprehension, transformation, process skills, and encoding. The subject's initial ability is used as the basis for providing scaffolding. Kubat, (2018) said that teachers need to know the level of readiness or initial understanding of students to develop learning methods or strategies.

In this study the subject does not experience reading errors but errors in understanding due to the subject's limitations in understanding the meaning of several terms contained in the instructions. This is the same as found by (Liliani, 2016) in her research which stated that mild mental retardation and ignorance of a term can lead to an inability to understand the reading/problem.

Effective scaffolding can assist subjects in overcoming this problem not by explaining the meaning of terms but by providing examples of work on the questions given. It is as done by Jannah (2019). The existence of examples of working on the questions makes the subject able to independently understand the meaning of the questions given and the subject can work on the questions according to these examples. Therefore, an example of working on the problem in each indicator of the problem is given to clarify the purpose of the problem. Hidayati, (2016) explained that the intellectual limitations of students with mild mental retardation make these students need to provide examples/exemplary in doing something. This is in line with Lei (2018) where one form of Scaffolding is visual Scaffolding which is

an aid to students in the form of figures or photos.

The subject also makes a transformation error, namely the inability of the subject to mention and write down the value of money. This is because the subject does not know the value of money. The scaffolding provided is level 2 scaffolding in the form of explaining by involving the concept of integers and giving the keywords "hundred" and "thousand" to overcome the inability of understanding the meaning of the value and the form of restructuring by analyzing the pattern of procedures to assist the subject in writing nominally.

From the scaffolding provided, the researcher finds that the subject can be invited to observe and follow the pattern of a procedure. This is in line with the results of the study by Agustina *et al* (2018) which stated that one way that can be used to train ability for ABK is to provide patterned activities that are carried out repeatedly. This is following the results of the study by Wrona, (2021) which stated that the right type of assistance for ABK students is based on routine (repetitive) activities.

Similar to the research by Saputri, (2017) the subject makes a process skill error. This error is shown by the subject when sorting money based on money values due to being fooled by memorizing the sequence of coin and paper money values. However, the subject can sort money based on its value by reading the number in front of the thousands because the subject can sort positive integers. This shows that ABK can also use logic to think analogously as described in the study by Lambert, (2018). This is also found in research by Labuem (2019) when the subject of ABK students solves the problems posed.

Implications

Based on the research results, the following research implications can be stated: 1) Identifying the types and causes of errors is very important in a lesson; 2) The preparation of an effective scaffolding is a preparation based on the incompetence, errors, and causes of student errors; 3) Scaffolding Anghileri has proven successful in helping ABK in Numeracy Literacy regarding the introduction of the value of money; 4) This research can provide an example to teachers how to explore abilities, disabilities, and develop effective scaffolding.

Limitations

Although in this study the Anghileri Scaffolding succeeded in helping students with special needs in the Mild Mentally Retardation category towards Numeracy Literacy in the Value of Money. However, the results of the error analysis and scaffolding design cannot be generalized to a larger group of subjects. This is because the subjects in this study are limited, namely an ABK in the mild mental retardation category who did not yet have numeracy literacy related to the value of money.

CONCLUSION

Based on the results and discussion, it can be concluded that in solving questions about the introduction of the value of money, the subjects make 3 types of errors, namely comprehension, transformation, and process skills. Misunderstanding occurs when the subject understands the information in the problem. The transformation error occurred due to the subject's inability to mention the value of money and the subject's ignorance of the procedure for writing the value of money in nominal terms. The process

skills error occurs when the subject sorts of money based on its value.

In this study, scaffolding that has succeeded in assisting children with special needs in numeracy literacy related to the introduction of the value of money is scaffolding level 1, namely Environmental Provisions, and level 2 with the types of Explaining and Restructuring and scaffolding level 3, namely Developing Conceptual Thinking.

This research has shown that different types of errors can result in different types of appropriate scaffolding. Even for the same type of fault, the scaffolding provided can be different if the causes of the fault are different. Therefore, the researcher suggests that in providing scaffolding to students with special needs, it must not only begin with identifying the location of the error but also proceed with identifying the cause of the error made by the subject.

In this study, the scaffolding provided to ABK is only limited to sorting monetary values and has not yet arrived at monetary equivalence. Therefore, it is suggested that further research can carry out further investigation because the ability to equalize the value of money is needed by ABK in everyday life, for example when processing payment transactions.

REFERENCES

Agustina, S., Nasirun, M., & Delrefi, D. (2018). Meningkatkan keterampilan motorik halus anak melalui bermain dengan barang bekas. *Jurnal Ilmiah Potensia, 3*(1), 24-33.

Ayuning, A., Pitaloka, P., Fakhiratunnisa, S. A., & Ningrum, T. K. (2022). Konsep Dasar Anak Berkebutuhan Khusus. *MASALIQ : Jurnal Pendidikan Dan Sains, 2*(1), 26–42.

Baharuddin, M. R., Sukmawati, S., & Christy, C. (2021). Deskripsi Kemampuan Numerasi Siswa dalam Menyelesaikan Operasi Pecahan. *Pedagogy: Jurnal Pendidikan Matematika, 6*(2), 90–101.

Clements, J. (1984). Classification in mental retardation. In Behaviour Research and Therapy (Vol. 22, Issue 4). https://doi.org/10.1016/0005-7967(84)90095-0

Damayanti, N. W. (2016). Praktik pemberian scaffolding oleh mahasiswa pendidikan matematika pada mata kuliah strategi belajar mengajar (sbm) matematika. *Jurnal Ilmiah Fakultas Keguruan Dan Ilmu Pendidikan, 18*(1), 87-97.

Efendi, M., Pradipta, R. F., Dewantoro, D. A., Ummah, U. S., Ediyanto, E., & Yasin, M. H. M. (2022). Inclusive Education for Students with Special Needs at Indonesian Public Schools. *International Journal of Instruction, 15*(2), 967–980. https://doi.org/10.29333/iji.2022.15253a

Hidayati, N. (2016). Model Pembelajaran Yang Efektif Bagi Siswa Tunagrahita Di Sekolah Menengah Pertama Luar Biasa (SMPLB) Bintara Campurdarat Tulungagung. [Doctoral Dissertation] Universitas Islam Negeri Maulana Malik Ibrahim Malang.

Irdamurni. (2015). Pendidikan Inklusif Solusi dalam Mendidik Anak Berkebutuhan Khusus. *Angewandte Chemie International Edition, 6*(11), 951–952., 211.

Jannah, U. R., Saleh, H., & Wahidah, A. (2019). Scaffolding untuk Pembelajaran Matematika di Kelas Inklusi. JKPM (Jurnal Kajian Pendidikan Matematika), 5(1), 61. https://doi.org/10.30998/jkpm.v5i1.5254

Kemendikbud. (2014). Peraturan Menteri Pendidikan dan kebudayaan Republik Indonesia Nomor 57 Tahun 2014 tentang Kurikulum Sekolah Dasar/Madrasah Ibtidaiyah. Education, 53(9), 1689–1699.

Kemendikbud. (2017). Materi Pendukung Literasi Numerasi. Kementrian Pendidikan Dan Kebudayaan, 8(9), 1–58.

Kubat, U. (2018). Identifying the individual differences among students during the learning and teaching process by science teachers. International Journal of Research in Education and Science, 4(1), 30–38. https://doi.org/10.21890/ijres.369746

Kusumadewi, F. ayu. (2016). Peningkatan Kemampuan Penggunaan Uang Peserta Didik Tunagrahita Kategori Ringan Melalui Pembelajaran Berbelanja di Kantin Pada Kelas Iv Sekolah Dasar Luar Biasa Di Sekolah Luar Biasa Tunas Bhakti Pleret Bantul. *Widia Ortodidaktika, 5*(11), 1110-1121.

Labuem, S. (2019). the Thinking Process of Children with Special Needs (Slow Learner) in Inclusion Classes in Solving Mathematical Problem. *Jurnal Pendidikan Matematika (JUPITEK), 2*(2), 43-50.

Lambert, R. (2018). "Indefensible, illogical, and unsupported"; Countering deficit mythologies about the potential of students with learning disabilities in mathematics. *Education Sciences, 8*(2), 72 (12 pages). https://doi.org/10.3390/educsci8020072

Lei, Q., Xin, Y. P., Morita-Mullaney, T., & Tzur, R. (2018). Analyzing a Discourse of Scaffolds for Mathematics Instruction for an ELL with Learning Disabilities. *North American Chapter of the International Group for the Psychology of Mathematics Education*, 460-467.

Liliani, O. (2016). Identifikasi Kesulitan Belajar Membaca Pemahaman pada Siswa Tunagrahita Kategori Ringan Kelas 5 di Sekolah Dasar Negeri Bangunrejo 2. *Widia Ortodidaktika, 5*(8), 787-794.

Lindstrom, C., & Sharma, M. D. (2011). Teaching physics novices at university: A case for stronger scaffolding. *Physical Review Special Topics - Physics Education Research, 7*(1), 1–14. https://doi.org/10.1103/PhysRevSTPER.7.010109

Mahsusiyah, E. (2014). Model Pendekatan Scaffolding untuk Peningkatan Kemampuan Sholat Siswa Tuna Grahita Sedang Di SDLB Dharmawanita Ujungpangkah–Gresik. *Jurnal Kebijakan dan Pengembangan Pendidikan, 2*(1).

Maybin, J.; Mercer, N.; Stierer, B. (1992) Scaffolding Learning in the Classroom. A book chapter in Norman K. (ed) *Thinking Voice, The work of National Oracy Project, Chapter 4.2,* pp. 186-195. Retrieved from https://core.ac.uk/download/pdf/106265.pdf?repositoryId=86

Moschkovich, J. N. (2015). Scaffolding student participation in mathematical practices. ZDM - Mathematics Education, 47(7), 1067–1078. https://doi.org/10.1007/s11858-015-0730-3

Murtiyasa, B., & Wulandari, V. (2020). Analisis Kesalahan Siswa Materi Bilangan Pecahan Berdasarkan Teori Newman. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika, 9*(3), 713-726 https://doi.org/10.24127/ajpm.v9i3.2795

Permendiknas. (2009). Permendiknas No 70 thn 2009. 2(5), 255.

Rohmah, M., & Sutiarso, S. (2018). Analysis problem solving in mathematical using theory Newman. *Eurasia Journal of Mathematics, Science and Technology Education, 14*(2), 671–681. https://doi.org/10.12973/ejmste/80630

Saputri, S., Ningsih, E. F., & Widyawati, S. (2017). Analisis Kesulitan Anak Tunagrahita Dalam Menyelesaikan Soal Operasi Penjumlahan Di Sekolah Luar Biasa (SLB) Harapan Ibu Metro. *MaPan, 5*(2), 187–200. https://doi.org/10.24252/mapan.v5n2a3

Setiawati, F. A. (2020). Mengenal Konsep-Konsep Anak Berkebutuhan Khusus dalam PAUD. *SELING: Jurnal Program Studi PGRA*, *6*(2), 193-208.

Sugino. (2013). Meningkatkan Kemampuan Mengenal Nilai Mata Uang Bagi Anak Tunagrahita Ringan Kelas VII Di SLB Negeri Tanjungpinang. *E-JUPEKhu (JURNAL ILMIAH PENDIDIKAN KHUSUS), 1*(2), 198-209.

Susilo, C. Y., & Prihatnani, E. (2022). Scaffolding for Slow Learner Children on Integer Operations. *Kreano, Jurnal Matematika Kreatif-Inovatif, 13*(1), 113–125. https://doi.org/10.15294/kreano.v13i1.34363

Winarsih, S., Hendra, J., Idris, F. H., & Adnan, E. (2013). Panduan penanganan nak berkebutuhan khusus bagi pendamping (orang tua, keluarga, dan masyarakat). *Kementerian Pemberdayaan Perempuan Dan Perlindungan Anak Republik Indonesia*, 1–17.

Wrona, S., & Wrona, K. (2021). Engagement of Children with Special Educational Needs following the Routines-Based Model. *International Journal of Special Education, 36*(1), 27–34. https://doi.org/10.52291/IJSE.2021.36.3

Zuhdi, Z. (2019). Upaya Meningkatkan Kemampuan Mengenal Mata Uang Pada Siswa Tunagrahita Ringan Melalui Metode Simulasi Berbelanja di Kantin Sekolah pada Siswa Kelas IV. *Tadabbur: Jurnal Peradaban Islam, 1*(1), 141–149. https://doi.org/10.22373/tadabbur.v1i1.53