The purpose of this study was to improve the ability to recognize buying and selling in supermarkets through interactive Educa studio media for students with mild intellectual disabilities. This study used classroom action research using interactive learning methods for students with mild intellectual disabilities as many as 5 students who took the test. The data collection technique in this study is a qualitative descriptive technique. We collected data based on the results of the tests imposed on respondents. Based on the results of the three cycles of action, it can be concluded that the use of Educa studio media can increase the ability to recognize buying and selling in supermarkets with an average increase in achievement of 0.5, learning achievement when compared to the initial conditions increases by an average of 1.5 from 5.00 to 6.50.
1. INTRODUCTION

According to Pebody et al. (2012), multimedia refers to various combinations of two or more media formats that are integrated into the form of information or instruction programs. Media Educa studio interactive is an interactive learning media that is animated in motion that can be directed by children to simulate buying and selling activities in supermarkets. Learning media has an important role in increasing the ability to recognize buying and selling, especially students with mild intellectual disabilities. According to Kemis and Ati (2013) mentally retarded are individuals who significantly have intelligence below 70 based on the Wechsler Intelligence Scale for Children (WISC). Based on the opinions above, it can be concluded that a child is categorized with intellectual disabilities if a child whose physical, social, and maturity development is hampered and requires special services. Special services are needed for students with intellectual disabilities to understand the concept of buying and selling.

Currently, many researchers discuss the understanding of the concept of buying and selling. Among them are, Improving the ability to use money in learning mathematics in mild category children through buying and buying role play at state extraordinary school (Wulandari, 2019), improving the currency reasoning ability of mentally impaired students in the practice of buying and selling in vocational catering for students (Sulistiohata, 2014). Implementation of learning buying activities in class I children of middle intelligence children (Irhamnia, 2016). Buying and buying games using money on the mathematics learning results of children with mild intellectual disability (Aromati, 2014), role-playing method of buying on calculation ability reduction in autism children (Putri, 2013). However, until now there has been no research that discusses the use of Interactive Educa Studio Media as an effort to increase the ability to recognize buying and selling in supermarkets for students with mild intellectual disabilities.

This study aims to improve the ability to recognize buying and selling in supermarkets through interactive Educa studio media for students with mild intellectual disabilities. Classroom Action Research method using interactive learning methods. The data collection technique in this study is a test technique. While the data analysis used was a qualitative descriptive technique, namely the collection of research data based on the results of tests imposed on test subjects to 5 students with mild intellectual disabilities. Based on the results of the three cycles of action, it can be concluded that the use of Educa studio media can improve the ability to recognize buying and selling in supermarkets with an average increase in achievement of 0.5, learning achievement when compared to the initial conditions increased by an average of 1.5 from 5 to 6.5. The novelty of this study is (i) the use of interactive studio education media, and (ii) the research subjects are students with mild intellectual disabilities.
2. METHODS

2.1. Subject and location research

The subjects of this study were grade IV students with mild intellectual disabilities at the Putera Mandiri BCD Special Need School for the 2019/2020 academic year, a total of 5 children consisting of 2 boys and 3 girls. This Classroom Action Research was conducted at BCD Putera Mandiri Special Need School, Mars Dirghayu I No. 15-17 Street, District, Bandung. This place was chosen because it was in accordance with the place of the researcher’s teaching assignment, and at the same time problems arose from the students with mild intellectual disabilities class.

2.2. Research procedure

This study focuses on the case of the use of interactive studio education media in increasing understanding of buying and selling concepts for mentally retarded students. The research flow includes: (i) Plan, (ii) Act and Observe, (iii) Reflect, (iv) Revised plan, (v) Act and Observer, (vi) Reflect.

Figure 1 explains the procedure for the research flow of classroom action research design which consists of several stages, namely with one set of components, namely planning, action, observation, and reflection.

![Figure 1. Classroom action research model design.](image1)

2.3. Activity procedure

Figure 2 describes the procedure for classroom action research activities consisting of the stages of planning, implementing, observing, and reflecting. In planning activities by identifying and assessing students, as well as discussing with colleagues who work with researchers in forming team teaching. At the stage of implementing this action, the researcher carries out learning procedures based on the concept of buying and selling by using the interactive media Educa studio in accordance with the learning plan/RPP that was made.

![Figure 2. Classroom action research activity procedure.](image2)
Steps in the first cycle are

(i) Planning. Researchers and observers work together to make a lesson plan for social studies material, the sub-topic "buying and selling", prepare observation and interview sheets, prepare the implementation of observations on learning media, prepare student worksheets about the results of student observations, and prepare an evaluation sheet for the end of the first cycle of action.

(ii) Implementation. The basis for consideration of learning strategies with interactive learning media was chosen because this interactive learning media is interesting to teach the concept of buying and selling

(iii) Observation. Observations were carried out by researchers and observers when carrying out learning activities using prepared observation sheets.

(iv) Reflection. The possibility that in the first cycle has not reached the predetermined criteria, then the process of improving learning in the second cycle needs to be addressed by exploring students' initial perceptions of the material to be studied before the learning process takes place, interactive learning media are still used by researchers.

Steps in the second cycle are

(i) Planning. Researchers and observers work together to make a learning improvement plan about buying and selling social science topics using interactive learning media. By exploring students' initial perceptions of the material to be studied before the learning process takes place. Prepare observation and interview sheets, make observations on students, prepare student worksheets about the results of student observations, and prepare evaluation sheets for the end of the second cycle of actions.

(ii) Implementation. In addition to the efforts made in the first cycle, additional efforts in the second cycle are to first explore students' initial perceptions of the material to be studied before the learning process takes place. From this initial perception, a learning process is developed. Learning will be meaningful if students can connect information or new subject matter with concepts or things that exist in the cognitive structure.

(iii) Observation. Observations were carried out by researchers and observers when carrying out teaching and learning activities using prepared observation sheets.

(iv) Reflection. The possibility in the second cycle has not yet reached the predetermined criteria, so the process of improving learning in the third cycle needs to be overcome by demonstrating buying and selling activities.

Steps in the third cycle are

(i) Planning. Researchers and observers work together to make a learning improvement plan about social studies material on the topic of buying and selling by demonstrating buying and selling activities as sellers and buyers, preparing observation sheets, preparing the implementation of observations on demonstrations of buying and selling activities, prepare student worksheets about the results of student observations, and prepare an evaluation sheet for the end of the third cycle of actions.

(ii) Implementation. In the second cycle, students are familiar with supermarkets and buying and selling activities. To improve students' understanding of the topic of buying and selling, in this third cycle students are asked to demonstrate buying and selling activities.

(iii) Observation. Observations were carried out by researchers and observers when carrying out learning activities using prepared observation sheets.
Reflection. In the third cycle, the predetermined criteria have been met, then the IPS material on the topic of buying and selling is considered to have been completed. Social studies material can be continued on the next topic.

2.4. Research instruments

The technique used to collect data in this study is a test technique. The test technique is the giving of tests to students to measure how far the abilities and results obtained by students after the test activities are given. The questions are in the form of 5 questions to determine the level of students' understanding of the material being taught.

We recommend that the classical success of children is met if the percentage of learning success reaches 60% has been included in the good category. Techniques used in this study are data analysis with value test statistics and complete learning according to Aqib (2009).

The assessment criteria given by each student who can answer the test questions correctly are given a value of 2, the maximum score obtained by students is 10 with calculations.

\[ N = \frac{\sum E C C O U N T \ SCORES}{\sum N U M B E R \ OF \ TESTS} \]

N = Final Value

In the aspect of development, we provide an assessment score for students' abilities in the value of 0 (not good), 1 (poor), 2 (good enough), 3 (enough), 4 (very good).

3. RESULTS AND DISCUSSION

3.1. Student demographics

Figure 3 describes the demographics of students consisting of motor, communication, concentration, language, and academic abilities. In line with that children with special needs are children who experience deviations, abnormalities, or disability in terms of physical, mental, emotional, and social, or from a combination of things it is such that they require special educational services adjusted for the deviation, their disability, or their handicap (Rizki, 2013).

(i) RT students have good motor skills, good communication and concentration, good language, and good academics, especially in the aspect of buying and selling concepts.

(ii) PT students have good motor skills, good communication, good concentration, good language, and academic skills, especially in the aspect of buying and selling concepts.

(iii) HD students have good motor skills, good communication and concentration, quite a good language, and good academics, especially in the aspect of buying and selling concepts.

(iv) AW students have quite good motor skills, communication and concentration are quite good, language and academics are quite good, especially in the aspect of buying and selling concepts.

(v) AL students have good motor skills, good communication and concentration, good language, and good academics, especially in the aspect of buying and selling concepts.

Table 1 describes the demographics of students, the condition of students’ initial abilities in the academic aspect of knowing buying and selling. Based on the minimum completeness criteria knowing the concept of buying and selling that has been determined, namely 6, it can be seen that of the 5 fourth grade students, 3 students still have difficulties in recognizing the concept of buying and selling. The following is the condition of the students in class IV:
RT is good enough to understand the concept of buying and selling, PT is still directed to understand the concept of buying and selling, sometimes it is confusing to determine the answer. HD is still directed to understand the concept of buying and selling, sometimes it is confusing to determine the answer, UW is still directed to understand the concept of buying and selling and sometimes guessing the contents of the answer, AL is still directed to understand the concept of buying and selling sometimes confused about the answer.

Table 1. Conditions of students' abilities in the academic aspect.

<table>
<thead>
<tr>
<th>No</th>
<th>Student</th>
<th>Code value obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Respondents RT</td>
<td>6.0</td>
</tr>
<tr>
<td>2</td>
<td>Respondents PT</td>
<td>4.0</td>
</tr>
<tr>
<td>3</td>
<td>Respondents HD</td>
<td>5.0</td>
</tr>
<tr>
<td>4</td>
<td>Respondents UW</td>
<td>5.0</td>
</tr>
<tr>
<td>5</td>
<td>Respondents AL</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>Amount</td>
<td>2.50</td>
</tr>
<tr>
<td></td>
<td>Class Average</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Not Completed</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Presentation not finished</td>
<td>80 %</td>
</tr>
<tr>
<td></td>
<td>Presentation complete</td>
<td>20 %</td>
</tr>
</tbody>
</table>

3.2. Learning process activities

Nasichin (2002) explained the preparations that must be done by teachers in dealing with students with special needs are: preparing knowledge and preparing mental. The implementation of the learning process activities are as follows:

(i) Pre-activity for 5 minutes. The teacher as a researcher prays and attends students first, then greets students, then the researcher asks questions from the previous subject matter as apperception, for example: What are the advantages of shopping at supermarkets? What is the purpose of our buying and selling/shopping? Why do we have to buy and sell? "Good" your answer is correct. The researcher commented on the answers given by the students. Researchers convey learning objectives.
(ii) **Initial Activity for 10 minutes.** Before the activities take place, the researcher has prepared a worksheet containing several questions that can encourage students to think logically, systematically, and critically, including: What’s in the supermarket? What are the advantages of buying and selling in supermarkets? What are the uses of supermarkets? What types of goods are sold in supermarkets? Then, the students were asked to sit in an orderly manner before the researcher gave a brief explanation of the concept of buying and selling to be carried out. **Figure 4** explains students are asked to download Media Educa Studio Interactive in the play store on their respective cellphones.

(iii) **Core Activities for 20 minutes.** All students together open the Interactive Media Educa Studio, play the educational game and identify the elements that must be in the supermarket and the advantages of shopping at the supermarket, the use of the supermarket, and the types of goods in the supermarket. Students can identify with other students. So they can discover many things by talking to other people. When students return to class, classically students identify the results of their observations, then the teacher writes the conclusions of the learning outcomes. Individually students record the elements that must be in the supermarket and the types of goods sold in the supermarket. Students are instructed to return to their seats to take formative tests.

**Figure 4.** Screenshot downloading media Educa studio marble interactive shopping.

**Figure 5** explains the initial appearance of interactive studio education media, children choose which supermarket they will visit in interactive studio education media, the child is picking up items that match his shopping list, a child who is paying for his groceries at the cashier, and finally the final look of Educa studio marble interactive shopping.

### 3.3. Pretest and posttest results or learning outcomes

**Table 2** explains the results of the initial study test, cycles I, II, III. The test is a series of questions or exercises, and other tools used to measure skills knowledge, intelligence, ability, or talent owned by a person or group. After the implementation of learning improvements in class IV students with mild intellectual disabilities in BCD Putera Mandiri Bandung special needs school regency through three cycles of classroom action research. Based on the data in **Table 2** shows the value acquisition has increased. This can be seen from the class average and the increasing percentage of completeness. At the beginning of learning or before the repairs were made to respondents who had not completed as many as 4 respondents from 5 respondents or 80%, respondents were worth 6.00 there was 1 respondent or 10 %.

(i) In the initial condition, 4 out of 1 student in grade IV with mild intellectual disabilities have not yet completed the basic competence of knowing the concept of buying and selling.
(ii) In the first cycle, 2 students have not finished, so their learning achievement needs to be improved as optimally as possible so that at the end of the first cycle, there is an increase in achievement of 0.7.

(iii) In the second cycle of students who have not finished studying as many as 1 student or by 10% but there is an increase in achievement of 0.1.

(iv) In the third cycle, all students have completed learning as many as 5 students or 100%, with an average increase in achievement of 0.7. Thus, compared to the initial conditions, there was an average increase in learning achievement of 1.5 and 5.0 to 6.5.

![Figure 5. Screenshot from media Educa studio marble interactive shopping.](image)

Table 2. Initial study test results, cycles I, II, and III.

<table>
<thead>
<tr>
<th>No</th>
<th>Student code</th>
<th>Initial conditions</th>
<th>Cycle I</th>
<th>Cycle II</th>
<th>Cycle III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Respondents RT</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
<td>7.0</td>
</tr>
<tr>
<td>2.</td>
<td>Respondents PT</td>
<td>4.0</td>
<td>5.0</td>
<td>5.5</td>
<td>6.0</td>
</tr>
<tr>
<td>3.</td>
<td>Respondents HD</td>
<td>5.0</td>
<td>5.5</td>
<td>6.0</td>
<td>6.0</td>
</tr>
<tr>
<td>4.</td>
<td>Respondents UW</td>
<td>5.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
<tr>
<td>5.</td>
<td>Respondents AL</td>
<td>5.0</td>
<td>6.0</td>
<td>6.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Amount</td>
<td>2.50</td>
<td>2.85</td>
<td>2.90</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td>Class average</td>
<td>5.0</td>
<td>5.7</td>
<td>5.8</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>Not finished</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Procenation is not finished</td>
<td>80%</td>
<td>40%</td>
<td>20%</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Complete procenation</td>
<td>20%</td>
<td>60%</td>
<td>80%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

3.4. Analysis of research

In this study, we implemented the use of interactive Educa studio media learning media to improve the ability to recognize the concept of buying and selling for students with mild intellectual disabilities in class IV BCD Putera Mandiri special need school in the 2019/2020 school year. Three aspects of social studies learning can be achieved at once. These three
aspects include aspects of social knowledge, social skills, and social attitudes. This is due to the learning strategy with interactive Educa studio media learning according to the child’s character, namely happy to play, happy to move, happy to work in groups, and happy to do direct demonstrations.

The design of the research used is the pattern of pre-test and post-test groups. It can be concluded that the understanding of buying and selling consoles in supermarkets increased from 5.0 with an average score of 5.7. In the second cycle, learning achievement increased to 5.8. And in the third cycle learning achievement increased an average score of 6.5. However, this still states that all students have exceeded the minimum completeness criteria, i.e., 6.5.

4. CONCLUSION

This study aims to improve the ability to recognize buying and selling in supermarkets through interactive Educa studio media for students with mild intellectual disabilities. Classroom action research method using interactive learning methods. The data collection technique in this study is a test technique. While the data analysis used was a qualitative descriptive technique, namely the collection of research data based on the results of tests imposed on test subjects to 5 students with mild intellectual disabilities. Based on the results of the three cycles of action, it can be concluded that the use of Educa studio media can improve the ability to recognize buying and selling in supermarkets with an average increase in achievement of 0.5. Learning achievement when compared to the initial conditions increased by an average of 1.5 from 5 to 6.5. The novelty of this study is (i) the use of interactive studio education media, and (ii) the research subjects are students with mild intellectual disabilities.

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6. AUTHOR NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.
7. REFERENCES


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