Application of Word Folding Board Media for Improvement of Word Vocabulary Students with Intellectual Disabilities

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ABSTRACT

The purpose of this study was to examine the level of effectiveness of using word folding board media to increase intellectual disability students’ vocabulary mastery. The subjects of this research were 4 intellectual disability students. The research method used was a classroom action-type method with a participatory collaborative type, with a demonstration learning method carried out in 2 cycles. The data used in this study was field studies through observation and learning outcomes tests. The results of data analysis showed that there is an increase in the vocabulary of intellectual disability students as much as 30-40% which is seen from the comparison of the initial test to the final test for 2 cycles, which is also indicated by an increase in the value of Indonesian lessons, with the grades 78, 80, 75, 81. It was above the Minimum Completeness Criteria value of 70. This letter folding board media is a fairly new and interesting medium, with elements of guessing games that are still attached to the elements of playing and interesting pictures. This media encourages students to try using this media to increase vocabulary in Indonesian language lessons. This study demonstrates that the use of interesting and easy-to-use media will accelerate understanding and increase vocabulary in students, especially intellectual disability students. In addition, it also challenges teachers to improve their media modification skills so that it is easier to guide their students.

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1. INTRODUCTION

Student learning achievement can be increased by the teacher through many kinds of media. Media is a tool that is used in the teaching-learning process. In addition, teaching media are everything that can be used to stimulate the thoughts, feelings, attention, and abilities or skills of the learner so that it can encourage the learning process. This limitation is quite broad and in-depth covering the understanding of sources, environment, humans, and methods that can be used for learning (Ekayani, 2017) This also applies to intellectual disability students.

According to Endang Rochyadi and Zainal Alimin, mental retardation is closely related to the problem of developing low intelligence abilities and is a condition.

It means, mental retardation refers to general intellectual functions that are significantly (significantly) below the average (normal) along with deficiencies in adjustment behavior and all of this takes place (manifests) during its developmental period.

AFMR (Vivian Navaratnam, 1987:403) said “a person who is categorized as mentally retarded must exceed the component of his intelligence state which is clearly below average, there is an inability to adapt to the norms and demands that apply in society.

Although in general students who experience mild and moderate mental retardation, they can still participate in physical education activities. Teachers must be careful of changes in behavior that often change quickly and can interfere with the comfort of other students, so the activity that is suitable for them is a play activity that can cause fun (Kesumawati, & Damanik, 2019).

This study uses the word folding board media. The word folding board media is a media created by the researcher herself. Media made from boards measuring 20 cm x 23 cm with the appearance of 1 large board bearing large letters and 4 small folding boards at each end containing pictures and writing nouns that are started by the letters listed on the large board.

Figure 1 explains that the word folding board media, made by the researcher herself from duplex material, is pasted with letters and words accompanied by interesting pictures. Each board has a small 7 x 7 cm child that is attached to a screw so that it can be folded in or out.

Currently, many studies discuss the improvement of vocabulary in intellectual disability students. Most of them are research on the language development of the student with intellectual Disabilities using the Role Play method. It is stated that the role-play method can improve the speaking ability of mild mentally retarded children, it can be seen from the increase in the average score of children’s speaking abilities at the beginning of the test, namely 10.4 fewer categories (52%), an increase to 11.6 fewer categories (58%) in the first stage of action and increased to 14 sufficient categories (70%) (Pratiwi et al., 2021).

The research that has been done is about efforts to increase vocabulary mastery with the method of pictorial crossword puzzles for mild students with intellectual Disabilities in class III SDLB at SLB Panca Bhakti. This study states that there is an increase in vocabulary mastery by 70% using the puzzle game method. The third research that supports this research is research on efforts to improve vocabulary with the role-playing method in mild students with intellectual Disabilities(PTK class DV at SLB Kartini Batam). The role-playing method in this study was carried out in groups and after the study had a major influence on increasing the vocabulary of the student with intellectual Disabilities (Febrisma, 2013).
The fourth relevant research is the application of image media to improve vocabulary in mild students with intellectual Disabilities in elementary grade II SLB/C Hamong Putro Jombor, Indonesia. This study used image media to introduce words to students with intellectual disabilities, and it was stated that it was successful in increasing the vocabulary of students with intellectual Disabilities.

The last research is about the effect of using the Scramble Method to improve English Vocabulary, this study states that learning to compose sentences using scramble games can improve the quality of learning because the learning process does not feel bored and boring. From the use of scramble games in learning to make students further improve learning achievement. The subject that is usually only abstract will be easier for students to understand when using games (Andriani & Pradipta, 2016).

From various studies that have been carried out previously, the researcher views that there has been no research on the use of Word Folding Board media to increase the vocabulary of students with intellectual disabilities. Researchers on this occasion will examine this in a study.

This research aims to know the effectiveness of using the word folding board media to increase the vocabulary of students with intellectual disabilities. This research has 4 students with intelligence barriers in SLB Luragung Indonesia.

This research method is classroom action research with participatory collaborative type. Participatory collaborative research involves researchers, teachers, and students in their activities. The learning method used in the classroom is the lecture method and the demonstration method is carried out in 2 cycles. The data collection technique uses field studies through observation and learning outcomes tests. Observations were carried out to obtain data on student abilities consisting of several descriptors that existed during the learning process. This observation was carried out using an observation sheet that had been prepared. Aspects observed include activity, participation, motivation, knowledge, and pronunciation of words. Observation activities were carried out during the research to strengthen the results of the data obtained from the test each cycle.

The test is carried out at the end of each cycle, it is intended to measure the results obtained by students after giving the action. The test is given in the form of a Performance Test which includes elements of knowledge of the names of objects and their pronunciation abilities.

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The data shows good results, namely if there is an increase in the vocabulary of the student with intellectual Disabilities as much as 30-40% seen from the comparison of the initial test to the final test for 2 cycles, and the value is above the Minimum Completeness Criteria value of 70.

The word folding board media in this study is a relatively new and interesting medium, with elements of guessing games that are still attached to elements of play and interesting pictures. This will certainly make students feel challenged to try and learn words in Indonesian lessons.

This study gives the view that the use of interesting media, easy-to-use media can make them understand and increase their vocabulary, especially students with intellectual Disabilities. In addition, the use of this media challenges teachers to conduct experiments so that it is easier to guide their students. In practice, this method also provides students with experience in recognizing the names of objects that have not been mastered before.

The novelty of this study is (1) the application of the word folding board media (ii) the research subjects are students with intellectual Disabilities

2. METHODS

The research method used in this research is a classroom action research method with a participatory collaborative type, with a demonstration learning method carried out in 2 cycles.

2.1. Subject and place of research

The research subjects used were 4 students from the special School. This school provides services to students with special needs.

2.2. Research procedure

Figure 2 describes the research procedure, namely Plan, Act & observe, reflect, revised plan, act and observe, lastly reflect. This research focuses on the case of the application of the word folding board media to increase the vocabulary of students with intellectual disabilities.

2.3. Activity procedure

Figure 3 Explains the procedures for research activities which consist of planning, implementing, observing, and reflecting. The planning stage includes activities to prepare an Indonesian Language Learning Implementation Plan (RPP) in accordance with the goals that have been set, preparing learning materials about objects related to objects that are often seen in everyday life, word folding board media, observation guidelines as a reference in observations during the implementation of learning activities, and evaluation tools in the form of pictures of objects related to oneself and the surrounding environment.
In the Implementation Stage, the teacher prepares children physically and mentally to take part in the learning process, the teacher conveys Indonesian language subject matter about nouns which is supported by the use of the prepared Word Folding Board media, the teacher guides, and provides opportunities and trust for children to use existing media, and teachers evaluate children's learning outcomes. The research was carried out in 2 cycles.

The observation phase includes the teacher observing the teaching and learning process that has been carried out. Recording events during the learning process are both related to the strengths and weaknesses that exist during the activity.

The Reflection Phase includes activities to evaluate processes, constraints, and problems that exist during the research process as a reference for improvement.

**Figure 3.** Activity procedure flow.

### 2.4. Research instruments

In our research activities, this study collected data through observation and tests. This study made an observation instrument in the form of questions. Observations were carried out to obtain data on student abilities consisting of several descriptors that existed during the learning process. This observation is carried out using the observation sheet that has been prepared.

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The first observation was carried out at the beginning of the study to see the initial conditions, including students' concentration, motor, language, and academic abilities. With the following assessment guidelines, 10-19 students show poor ability, 20-29 moderate ability, 30-39 good category, 40 and above very good.

The test is carried out at the end of each cycle, it is intended to measure the results obtained by students after giving the action. The test is in oral form. Test activities are carried out before the implementation of the action to determine the initial ability of the child in terms of the ability to pronounce nouns.

The assessment criteria used are B = Good if the child can recognize and pronounce the name of the noun he sees, C = Enough if the child is only able to pronounce nouns under the direction of the teacher, and K = Less if the child is unable to pronounce the noun according to the picture shown.
3. RESULTS AND DISCUSSION

3.1. Student demographics

Table 1 describes the results of the assessment of 5 grade 2 SDLB students aged 10-12 years including:

a. Student K has enough concentration, able to sit quietly for approximately 20 minutes. Sufficient motor skills, good posture, able to walk, coordination between eye and hand is enough, hand flexibility is visible. Language skill is good enough, able to understand passive instructions, able to speak with well-understood articulations. The academic students' condition is enough, able to recognize objects around, able to recognize colors. K students need guidance in the language aspect, especially in the vocabulary aspect.

b. Student AR has a sufficient level of concentration, can sit quietly, have a good level of compliance. Good motor skills, good hand-eye coordination, good hand flexibility. AR language skills are sufficient, AR can understand instructions, speak with a fairly understandable articulation. His academic condition is also in the adequate category, AR students can recognize the names of objects around them, recognize colors and shapes. AR students need assistance to optimize language and academic skills.

c. Student AL has a low level of concentration, can sit with still need conditioning, and has a low level of compliance. Sufficient motor skills, sufficient hand-eye coordination, sufficient hand flexibility. AL language skills are lacking, AL is less able to understand instructions, speak with poorly understood articulations. Academic conditions are also in the poor category, AL students are directed to recognize the names of objects around them, recognize colors and shapes. AL students need serious assistance to improve their abilities.

d. Student D has a sufficient level of concentration, sits quietly for about 15 minutes, and has a sufficient level of compliance. Sufficient motor skills, sufficient hand-eye coordination, sufficient hand flexibility. D language skills are lacking, AL is less able to understand instructions, speak with poorly understood articulations. Academic conditions are also in the poor category, AL students are directed to recognize the names of objects around them, recognize colors and shapes.

Figure 4 describes the results of student assessments consisting of motor, language, concentration and academic aspects. Concentration includes sitting quietly, listening duration and gradually in learning situations. Concentration shows a fairly downward condition. Motor shows ability at a mod Passive language skills at a sufficient level, speaking skills at a low levelerate level and above. Includes hand eye coordination and mobility skills. Varied academic ability, generally shows sufficient potential.

Table 1. Student assessment results of the assessment of 5 grade 2 SDLB students aged 10-12 years about concentration, motoric, language and academic condition.

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Concentration</th>
<th>Motoric</th>
<th>Language</th>
<th>Academic Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>20</td>
<td>25</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>AR</td>
<td>20</td>
<td>28</td>
<td>22</td>
<td>26</td>
</tr>
<tr>
<td>AL</td>
<td>10</td>
<td>20</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>D</td>
<td>15</td>
<td>26</td>
<td>18</td>
<td>20</td>
</tr>
</tbody>
</table>
3.2. Learning process

In this study, the learning process was carried out in 2 cycles with the following explanation:

(i) Initial Activities. Student conditioning, and Pre-Test.

(ii) Core Activities. Students try to pronounce the name of the object, Students are divided into tasks to memorize the names of objects, each 1 board for 2 people. Students listen to the teacher's explanation of the names of objects on each board. Students try to pronounce the names of objects in front of the class. Students exchange folding board media, to increase the vocabulary of noun names. Students play guessing the names of objects, by covering the names of objects on the folding board media. Students practice pronouncing the names of objects, those who manage to memorize 1 object name will get a 1-star sticker.

(iii) Final Activities. Concluding learning and Carry out post-test. The method used in this learning activity is the lecture and demonstration method.

(iv) The strategy used is as follows: (i) Create a comfortable learning atmosphere in the classroom, (ii) Participatory learning, students and teachers are actively involved in learning, (iii) Learning with direct practice, so that students are honed from the cognitive, motoric aspects as well as socialization, and (iv) Learn with the closest environment.

3.3. Research Results

Table 2 describes the improvement of student learning outcomes from pre-cycle to cycle 2 twice using the folding board media.

- Student K has a pre-cycle score of 60, in cycle 1 the score increases to 70. In cycle 2 the score becomes 80. This is in line with the statement that student learning achievement can be improved through various kinds of efforts that can be made by the teacher, one of which is the use of learning media in each subject. (Ekayani, 2017)
• AR students have a pre-cycle score of 65, the value of cycle 1 75 has an increase in score of 10. In Cycle 2 the score becomes 81, there is an increase of 5. The increase is smaller than the previous cycle because several conditions affect it.
• AL students obtained a pre-cycle score of 50, in cycle 1 the score increased to 60. There was an increase of 10. In Cycle 2 the score obtained was 75. There was an increase of 15 compared to the previous cycle.
• Student D got a pre-cycle score of 55, in cycle 1, it increased to 68. An increase of 13 scores compared to pre-cycle. On this Cycle, it scores 78.

Figure 5 describes on the data on improving student learning outcomes from Pre-cycle to cycle 2. The increase in scores from pre-cycle to cycle 2 ranged from 10-13. this is influenced by the condition of students and the environment. The improvement in students' abilities can be seen from the comparison of pre-cycle conditions to cycle 1. students at this stage have shown learning motivation and enthusiasm to try new media. At the stage of cycle 1 to cycle 2 there is an increase of 10-15 points. this is influenced by a sense of comfort, familiar media, and stronger learning motivation. A high increase in ability is seen when there is a comparison between pre-cycle and condition 2. Motivation and student learning outcomes increase up to 35%.

K, showed a steady improvement of 10 points. This is because K has a good pre-cycle score, so that with the application of new media an increase is seen in cycles 1 and AR. The increase in ability is different in each cycle. This is due to health factors. In Cycle 2 AR experienced pain. But overall AR is improving AL, in cycle 1 increased by 10 points compared to pre-cycle conditions. In Cycle 2 an increase of 15 points. Overall increased by 25 points. D, The increase in learning outcomes can be seen in cycle 1 as many as 13 points. the use of new media motivates D to learn. In Cycle 2 there is an increase of 10 points. D, the more confident to learn with new media. Overall there is an increase of 23 points.

Table 2. Improving student learning outcomes from pre-cycle to cycle 2.

<table>
<thead>
<tr>
<th>Name</th>
<th>Pre-Cycle</th>
<th>Cycle I</th>
<th>Cycle II</th>
<th>Upgrade Precycle to Cycle 1</th>
<th>Upgrade Cycle 1 to Cycle 2</th>
<th>Upgrade Pre-cycle to Cycle 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>10</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>AR</td>
<td>65</td>
<td>75</td>
<td>81</td>
<td>10</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>AL</td>
<td>50</td>
<td>60</td>
<td>75</td>
<td>10</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>D</td>
<td>55</td>
<td>68</td>
<td>78</td>
<td>13</td>
<td>10</td>
<td>23</td>
</tr>
</tbody>
</table>
3.4. Analysis of research activity results

In this study, this study implemented the word folding board media for students with intellectual Disabilities to increase vocabulary. Based on the results of the assessment, the following results were obtained:

Table 3 describes the results of research activities starting from the pre-cycle to cycle 2.

a. In the Pre-cycle Activities, Students K, AR, Al, D participated in a series of observation and test activities to determine the students' initial conditions. This activity includes the ability to recognize letters, recognize the names of objects in the immediate environment, the ability to pronounce nouns, motivation, concentration, and fine motor skills.

It was found that Student K scored a score of 60, 65, 50,55, all of which were below the KKM 70.

a. In Cycle 1, 4 students with intellectual Disabilities (K, AR, AL, D) experienced an increase in the score at each stage. 1 person above the KKM, 1 person at the KKM threshold, and 2 people below the KKM.

Based on the results of observations during the learning process to recognize the names of objects using the word folding board media, the activeness of students to use the media began to appear, students were still at the media introduction stage trying to use and study the letter folding boards one by one. Student motivation can be seen from the interest in mentioning the names of letters in nouns.

b. The results of the evaluation in cycle 2, students K, Ar, Al, D showed rapid development with the use of this media, as seen from the score in cycle II. All get a score above the KKM.

Based on the results of observations during the learning process to recognize the names of objects using the word folding board media, the student's activity in using the media seems to have increased, students are already at the stage of knowing the media operations well, the courage to try, use and learn one by one word folding board
increases. Students’ motivation can be seen from their interest in mentioning the names of letters in nouns.

By reviewing the results of observations, there are several reasons, namely the child can maintain concentration while studying, and can determine which letter-folding board media will be studied first.

**Figure 6** describes the results of research activities starting from the pre-cycle to cycle 2. An increase in the ability of each student is seen in cycle 1 and cycle 2 and the score is above the minimum standard of the class. K, showed an increase in learning outcomes at the pre-cycle stage, the score was still below the minimum class standard. In Cycle 1 the score of 70 is in accordance with the Minimum Standards for the class. In the second cycle, the score of 80 is above the minimum class standard. AR, Shows sor 65 in pre cycle. This value is below the minimum grade standard.

In Cycle 1 AR shows an increase of 10 points and the value is above the minimum standard of the class. In Cycle 2, AR got a score of 85 already exceeding the minimum standard value for the class. AL, get a pre-cycle value of 50 below the minimum standard value of the class. In cycle 1, the AL score of 60 is still below the minimum grade. This is due to the low concentration of AL. With the class arrangement, in cycle 2 the AL score increased to 75 already above the minimum standard value for the class. D, getting a pre-cycle score of 55 below the minimum grade standard. In Cycle 1, the value of 68 is still below the minimum standard value for the class. This is due to concentration and lack of self-confidence and sense. In cycle 2 with a personal approach and class arrangement, the value increases to 78. The value is above the minimum standard value for the class.

<table>
<thead>
<tr>
<th>Name of Student</th>
<th>Pre Cycle</th>
<th>Cycle I</th>
<th>Cycle II</th>
<th>Class minimum standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>70</td>
</tr>
<tr>
<td>AR</td>
<td>65</td>
<td>75</td>
<td>81</td>
<td>70</td>
</tr>
<tr>
<td>AL</td>
<td>50</td>
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<td>70</td>
</tr>
<tr>
<td>D</td>
<td>55</td>
<td>68</td>
<td>78</td>
<td>70</td>
</tr>
</tbody>
</table>

**Table 3.** Results of research activities.

**Figure 6.** Results of research activities.
4. CONCLUSION

This study aims to determine the level of effectiveness of using word folding board media to increase the vocabulary of 4 students with intellectual Disabilities. The research method used in this research is classroom action research with participatory collaborative type, with demonstration learning method carried out in 2 cycles. The data collection technique uses field studies through observation and learning outcomes tests. Based on the results of data analysis showed that there was an increase in the vocabulary of students with intellectual Disabilities as much as 30-40% seen from the comparison of the initial test to the final test for 2 cycles indicated by an increase in the value of Indonesian language lessons 78,80,75,81 above the Minimum Completeness Criteria score of 70. Thus it can be stated that this letter folding board media is a relatively new and interesting medium, with elements of guessing games that are still attached to the elements of playing and interesting pictures so that it is appropriate to use it to improve the vocabulary of students with intellectual Disabilities. This study demonstrates that the use of interesting, easy-to-use media will accelerate students' understanding and vocabulary improvement, especially students with intellectual Disabilities. In addition, it challenges teachers to improve their media modification skills so that it is easier to guide their students.

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7. REFERENCES


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