

The Effect of Directed Reading Thinking Activity (DRTA) towards the Ability of Reading Understanding of Intellectual Disability Students in SDLB

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Abstract: Barriers in the cognitive processes stages make intellectual disability students have problems in reading comprehension. *Directed Reading Thinking Activity* (DRTA) which demands student activity during the learning process can be a solution to overcome the problem of the students' reading understanding. The purpose of this study is to describe the effect of the DRTA usage towards the reading comprehension ability of intellectual disability students in SDLB. The method used is a quasi experiment with times series design. The results showed a significant increase (comparing mean pre-test = 69.4 and post-test value = 87), while significance value (2-tailed) was less than α . In conclusion, the use of DRTA has an effect on the reading comprehension of the intellectual disability students in SDLB.

Keywords: DRTA, reading comprehension, intellectual disability

INTRODUCTION

Many terms are used by society to designate individuals with characteristics of intellectual barriers and adaptive behavior. The term that is commonly used in the world of education in Indonesia is mental retardation. The latest term from the American Association on Intellectual Developmental Disabilities (AAIDD) is Individuals with Intellectual Disability (IDD). Mental retardation refers to the condition of someone who experiences obstacles in intellectual function and adaptive behavior. This is consistent with the definition put forward by the American Association on Intellectual Developmental Disabilities (AAIDD). According to AAIDD (2010) intellectual disability is shown by the presence of significant barriers in two abilities namely intellectual function (learning and problem solving) and adaptive behavior (social and practical skills) where manifestations of these barriers occur before the age of 18 years.

From the above definition it is known that intellectual disability experiences problems in intellectual functioning. Efendi (2009) mentions that intellectual disability children generally experience weakness in one or more of several stages of cognitive processes including perception, memory, idea development, judgment and reasoning. Efendi (2009) added "Based on various study results it is known that the inability of intellectual disability children to achieve better performance because of intellectual disability children's loyalty is very weak". This is consistent with the opinion of Kirk et al (2009) which states that intellectual disability children have difficulty in the process of recalling new information because of their limitations in short term memory. The existence of a

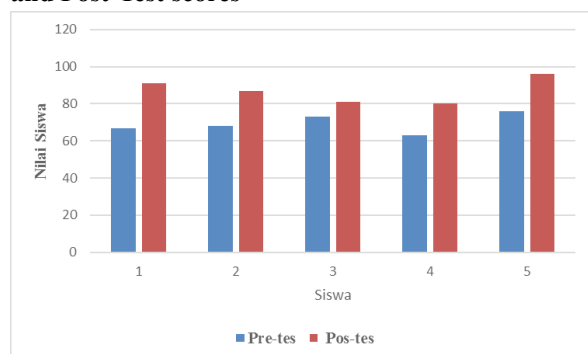
problem in terms of memory also results in the lack of understanding ability of intellectual disability students.

Learning to read in Indonesia is given at the elementary school level, starting from the beginning reading to reading comprehension stage. To teach these two reading skills, the teacher needs to choose a teaching strategy that suits the students' potential and obstacles. Rahim (2008) stated that when students experience a direct understanding learning, this strategy increases the understanding of texts about reading topics. A prerequisite that students must reach before reaching the reading comprehension stage is that students are able to pass the initial reading stage well. In the beginning reading a student learns to recognize the alphabet symbols then arranges them into syllables, simple words and sentences. In reading comprehension, students will try to find out the intent that the writer wants to convey in the reading. To achieve these objectives, the reader needs to interact with the reading text, so that, the reader can obtain meaning from the reading text. Reading comprehension skills are needed for intellectual disability students so that the students can obtain meaning from reading more easily. We know that with the development of science and technology at this time, a lot of information is delivered in the form of reading. So that if the intellectual disability students have the ability to read a good understanding, they can follow the development of information independently.

The teachers should consider not only in choosing teaching strategies for reading comprehension in addition to students' potentials and obstacles but also student involvement during the learning process. Yunus (2012) states DRTA directs students to involve thinking processes when they prepare reading through the process of reconstructing experiences in predictions.

Table 1. Recapitulation of Student's Pre-test and Post-Test scores

No	<i>Pre-tes</i>	Pos-Tes
1	67	91
2	68	87
3	73	81
4	63	80
5	76	96
Average	69,4	87

Figure 1 Recapitulation Graph of Average Pre-test and Post-Test scores

In addition to preparing predictions students can also be encouraged to ask questions or hypotheses to help improve students' thinking abilities. The activity of preparing predictions by students is expected to encourage them to find messages that the writer will convey through reading. Burns et al (2005) mention in making predictions students will use the basis of their previous knowledge about the topic of reading. Widyawati (2014) explains the application of DRTA in her research can increase the enthusiasm and activeness of students during the learning process. They are increasingly interested in reading fairy tale texts. Al Odwan (2012) added DRTA is an appropriate model for building independence in reading because the students have more activities ranging from determining the purpose of reading to preparing predictions to check the truth of predictions after reading the text.

To determine the effect of the DRTA usage on the intellectual disabilities students' ability to read comprehension in grade IV SDLB, the initial stage conducted in this study was to measure the reading comprehension ability of students with intellectual disabilities before DRTA usage (pre-test). Next, measuring students' reading comprehension ability after the DRTA usage (post-test). The results of the value of these two conditions are then analyzed to determine whether there is an effect of the use of DRTA on the reading comprehension ability of intellectual disability students.

METHOD

The method used in this study is quasi-experimental. According to Sugiyono (2015) experimental research methods are used to find the effect of te treatment

This study determining whether there is an effect or not on the DRTA usage is done through the Wilcoxon test with the help of SPSS 16 for Windows. For arriving at the conclusion that the hypothesis is accepted or rejected is done by comparing the value of sig. 2 (2-tailed) as a result of statistical tests with a value of α , which in this study determined the value of $\alpha = 0.05$, table 1.

From the Wilcoxon marked multilevel test, sig results were obtained. 2 (2-tailed) 0.043. From these results it is known that the value of sig. 2 (2-tailed) 0.043 less than the value (0.05), the decision is to reject Ho. So, with a confidence level of 5%, it can be said that there is an effect of the DRTA usage on the ability to read comprehension, figure 1.

Discussion

During the pre-test activities for oral questions, it was apparent that most students answered questions doubtfully, even some students needed guidance to be able to answer questions verbally. The students also have difficulty expressing the answers to be given. In the performance pre-test and answering questions some students experienced confusion and lack of confidence, even in answering written questions there were students who stated that the questions given were too difficult. The hesitation in answering oral questions, completing the performance shows the lack of students' understanding of the given reading. Inaccurate answers in written questions also indicate the ability of students' understanding of reading that is still lacking. Lack of understanding ability in intellectual disability students occurs because of obstacles in one of the cognitive processes experienced by students in accordance with what was stated by Efendi (2009) "in intellectual disability children, impaired cognitive function occurs in the weaknesses of one or more in the process (among the processes of perception, memory, idea development, judgment and reasoning)". In addition, Efendi (2009) stated "based on various study results it is known that the inability of intellectual disability children to achieve better performance because of the retention of mental retardation children is very weak". This is consistent with the opinion of Kirk et al (2009) which states that intellectual disability children have difficulty in the process of recalling new information because of their limitations in short term memory. The existence of a problem in terms of memory also results in the lack of understanding ability of intellectual

disability students. The average pre-test score that showed the students' reading comprehension was 69.4. The lowest score of this pre-test was 63 and the highest score of the pre-test was 76.

Based on the results of the recapitulation of the pre-test and post-test scores, it is known that there is an increase in the scores obtained by students. Based on these values it is said that there are differences in students' reading comprehension ability after the use of DRTA in learning. The grades were obtained both from the students' the test of the effect of using DRTA on students' reading comprehension ability and students' self-confidence. Students who were previously doubtful seemed more confident in giving answers both verbally and in writing. For students' reading comprehension skills shown in student performance tests, they are no longer confused by the stages of work steps that must be performed. The average post-test score of 5 students was 87. The lowest average score in the post-test was 80 and the highest average score in this post-test was 96. There is an increase in the reading comprehension ability of students with intellectual disabilities after the use of DRTA in this study in accordance with the opinion of Burns et al (2005) which states "perhaps because the student is interacting with the material during reading, the DRTA is extremely useful for improving children's comprehension of selections". DRTA can improve students' understanding possibly because students actively interact with reading material during the reading process.

The effect of the use of DRTA is shown through the results of hypothesis testing as well as from the results of students' ability tests on pre-tests and post-tests. This is in line with research conducted by Yazdani and Mohammadi (2015) which shows an increase in the results of post-test scores after the use of DRTA in learning. Yazdani and Mohammadi (2015) states that the use of DRTA is effectively used to improve students' understanding abilities. The effect of using DRTA is also seen in the learning process. In the learning process with DRTA students are required to be more active in thinking and following the learning process. Students think actively by writing down observations before being given reading texts. In addition, student activities during the learning process are no longer monotonous as usual, which only writes and reads readings together, and then answers questions. In learning with the use of DRTA students are guided to discuss reading texts. Students are also guided more actively to ask or answer questions. This is in accordance with the opinion of Yazdani and Mohammadi (2015) that DRTA is a strategy that guides students in compiling questions according to reading, making predictions according to reading, then proving predictions after reading reading texts. The effect of the DRTA usage is also seen in the enthusiasm and interest

of students in participating in learning. The use of DRTA can increase students' enthusiasm in following the learning process, as stated by Widyawati (2014) the application of DRTA can increase the enthusiasm and activeness of students during the learning process, students are increasingly interested and interested in reading fairy tale texts. The enthusiasm can facilitate students in understanding the contents of reading because they learn based on their own desires.

Conclusion

From the results of this study it is concluded that DRTA is effectively used in enhancing the reading comprehension ability of students with intellectual disability in grade IV at SDLB. This conclusion was obtained from the comparison of statistical test values of 0.043 which was smaller than the value of α (0.05). Based on the predetermined testing criteria, it is concluded to reject H_0 , which means that the DRTA usage affects the ability to read comprehension grade IV in SDLB.

The findings of this study can be used as a consideration for teachers to use DRTA in the implementation of bahasa Indonesia learning to improve the reading comprehension ability of intellectual disability students, for other researchers to develop in terms of the use of DRTA material in student learning and development in research subjects using DRTA in learning.

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