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INTERACTIVE MULTIMEDIA TO ENHANCE EARLY READING SKILL ON CHILDREN WITH LIGHT MENTAL RETARDATION AT 5TH GRADER SLB AUTIS MITRA ANANDA KARANGANYAR, INDONESIA IN ACADEMIC YEAR 2016/2017

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Abstract:
The main problem of this study is whether by using interactive media can improve students' early reading skill with light mental retardation of fifth grader in SLB Autis Mitra Ananda Karanganyar in academic year 2016/2017?

The objective of this research is an attempt to improve early reading skill by using interactive multimedia on students with light mental retardation in the fifth grader SLB Autis Mitra Ananda Karanganyar in academic year 2016/2017.

This research was classroom action research. The subjects were the fifth grader of private special school of Mitra Ananda Colomadu sub district Karanganyar regency in the first semester academic year 2016/2017 with 4 students. This classroom action research was conducted over 3 months, from October to December from preliminary stage till reporting phase through 3 cycles.

This research used test as a method of collecting data. Technique of data analysis was descriptive qualitative in each cycle.

The result of this study shows that the improvement of learning outcomes can be done by using interactive multimedia in learning early reading of fifth grader of SLB Autis Mitra Ananda Colomadu Sub district Karanganyar regency in the first semester academic year 2016/2017. It is marked by the achievement of students' average scores in learning early reading which always increases from prior and after action in each cycle.

The result presented as follows: the average score of learning material in early reading is 53.75, the average score of early reading in cycle 1 is 60, the average score of

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early reading in cycle 2 is 66.25, the average score of early reading in cycle 3 is 76.5 and all students are already reaching the passing grade 75.

Keywords: interactive multimedia, early reading, light mental retardation

1. Introduction

Education is implemented so that students are able to get same opportunities to develop their potential, through developing the potential they possess. It is in accordance with constitute article 31, paragraph 1 that *“"Every citizen has right to get teaching*" and article 31, paragraph 2, which reads "*The government manages and organizes a system of national teaching, regulated by law*". According to Law No.20 of 2003 on National Education System (*sisdiknas*) Article 5, paragraph 2 has been explained that the citizens who have physical, emotional, mental, intellectual and social disorder deserve special education. Seeing the description of the legislation above, it is clear that all citizens either normal or special needs are obligated to get education. They are who classified as special needs also need education to live by. In addition, through obtaining education and knowledge, it helps children with special needs to meet its own needs in accordance with their capabilities. Children with special needs require special education than in any other normal child.

It can be seen that every citizen has right to get education so that the potential that exists within him can be developed in accordance with their abilities and interests, including individuals who have mental limitations or commonly called mental retardation child. *''Mentally Retarded or mental retardation is a condition in which the development of intelligence is congested, so it does not reach the optimum stage of development*" (Somantri, 2006: 103). Here the researchers take one of mental retardation as research subject that is light mental retardation child.

One of the problems faced by children with light mental retardation is some children have difficulties when learning process takes place. Learning difficulties often experienced by some students due to the lack of concentration on the material explained by teachers when teaching and learning process takes place, since one of children’s characteristics with light mental retardation is being difficult to concentrate. Other causes leading light mental retardation students to be difficult to concentrate is caused by a lack of interesting media used by teacher while delivering course material, thus affecting the learning outcomes below the average score for example on reading

skills. One way to gain knowledge is to read, because reading leads students to get some important knowledge.

In the reality, Language learning achievement of mental retardation children are below average score. It is not wholly from students factors, but some factors also affect such as the use of media that is not in accordance with the subject and also the delivery of teacher teaching which is equated with normal children, whereas children with mental retardation requires more attractiveness media so that they do not easily get bored and can concentrate.

Teachers have very important roles in the teaching and learning process so that teachers must master the teaching materials, learning strategies and are able to develop teaching methods in accordance with the topics to be taught and also the use of appropriate media that is in accordance with the material to be delivered. According to Law No. 14 Year 2005 on Teachers and Lecturers Article 1: "*Teachers are professional educators with the primary task of educating, teaching, guiding, directing, training, assessing, and evaluating students on early childhood education, formal education, elementary, and secondary*" (Mustah, 2011; 3). The use of appropriate media in the learning process will help students to receive the material and increase the interest of students to the lesson. The use of instructional media will also help facilitating teachers in delivering the material to the students. This is similar to Hamalik (1989: 124) that defines "…i*nstructional media is as a means, a tool or process used / taken to deliver the message, which takes place in the educational process*".

Media selections that are less appropriate in language learning, especially in this case, reading that is considered to be difficult subject that will lead to boredom in children, especially in children with light mental retardation which requires appropriate learning media to help the learning process running properly and fun, The use of appropriate media in the learning process will help students to receive the material and increase the students' interest to the lesson. The use of instructional media will also help to facilitate teachers in delivering the material to the students. It is in accordance with Hamalik (1989:124) that defines "*Instructional media is as a means, a tool or process used / taken to deliver the message, which takes place in the educational process*".

In relevant research journal done by Karen Morrison in his study entitled "*Implementation of Assistive Computer Technology: A Model For School Systems*" Karen explains "*The benefits of computer technology have transformed the academic experience for students with learning problems. The potential of assistive computer technology (ACT) to address educational needs for students with learning problem is well documented*" it means that "*The benefit of computer technology can change academic experience for students with*

learning problem. The potential of computer technology can assist to meet the educational need for students with learning problem that will be properly documented" (Morrison; 2007;83).

Based on description above, the researcher uses interactive multimedia in reading skill. The use of multimedia in the early reading is expected to attract students' need in learning recognizing and reading letters and words. Besides, students will not be bored easily. Therefore, the researcher is interested to conduct a research entitled "*through the use of interactive multimedia in an attempt to improve early reading skill on light mental retardation children on the fifth grader SLB Autis Mitra Ananda Karanganyar in the academic year 2016/2017*".

2. Research Methodology

Research methodology is "*a science that discusses about methods and actions as a result of human desire to know scientific level that is channeled through high thoughts accompanied by the belief that there is a cause for effect and that every symptoms appears can be sought the explanation scientifically*" Koentjoroningrat (1993: 7). Meanwhile, the definition of the research is as an attempt or activity that aims to solve a problem using some ways and methods scientifically. From the definitions above it can be concluded that research methodology is "*a study of methods or system for solving a problem one faces in conducting a scientific research*". Winarno Surahmad (1993: 96).

Types of research methodology

There are three types of research methodology, namely:

1. Descriptive method

Descriptive method is a method that the investigation focuses in solving problem in future times.

2. Experimental research

Experimental research is a method of investigation by conducting experimental activity to know a result

3. Historical research

Historical research is a research method that classifies solving problem method scientifically and historically prospective (Winarno surahmad, 1993: 131).

The method used in this reserach was descriptive qualitative method. This reserach used descriptive method, that was for the purpose of this research could be achieved precisely and satisfyingly. According to H.J. Waluyo (1992: 24) describes that descriptive method is a research method of social status or group of people, an object, a condition, a grading system, or a class of events in the present.

This classroom action research was conducted in the fifth grade SLB Autis Mitra Ananda, Colomadu sub district, Karanganyar regency. The researcher chose this school since it was a place for researcher taught so that it facilitated to conduct a research. This research was conducted in the first semester academic year 2016/2017 from October to December 2016 with 4 students with light mental retardation.

The data obtained and studied in this research was qualitative data. The sources of data include:

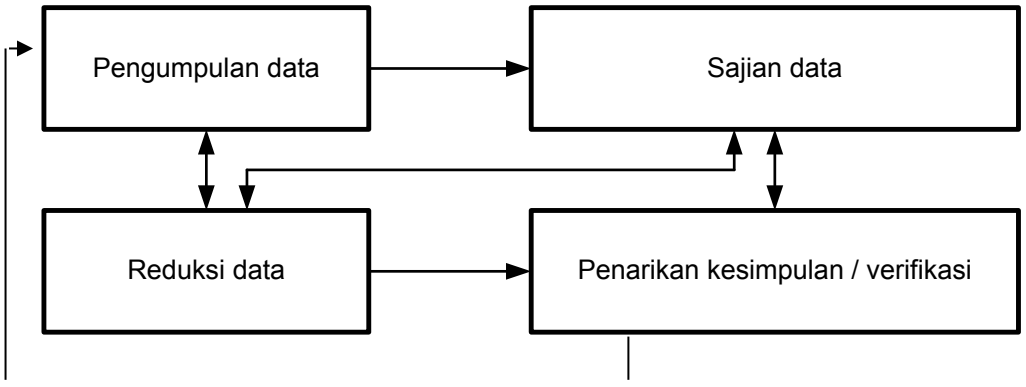
1. The primary source data, namely students, teacher and parents.
2. The secondary source data, namely file/document, achievement test

The techniques of data collection in this research are

1. Document, the researcher collected the written data in form of reading skill score to know the language score before the CAR is implemented;
2. Test, pretest and posttest to measure students ability toward the concept being taught;
3. Observation, direct observation to an object being examined. The observation was used to collect data about student', teachers' condition, teaching and learning activity and school condition.

The researcher used triangulation to guarantee and evolve data validity. The triangulation used in this research was data triangulation obtained from document, and test.

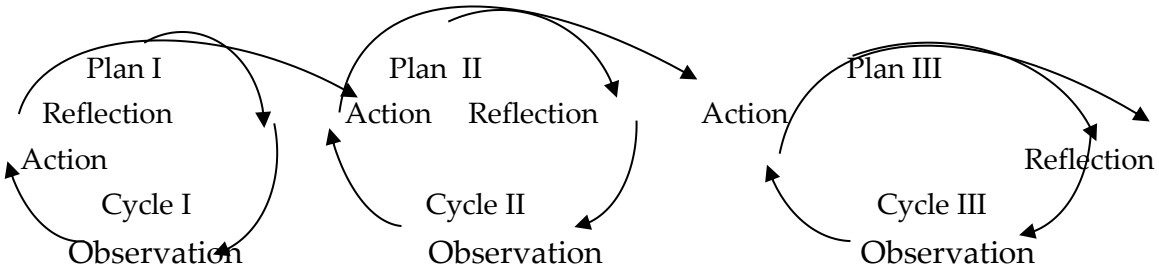
The technique of data analysis in this research was analyzed by flow model, including data reduction, data presentation stage and conclusion stage. The data analysis was done in every one cycle completed either from the result of test or observation, by seeing the pretest score, process and the score of observation in the cycle being implemented compared to the previous cycle. Interactive analysis model was presented in the picture below.



In the data analysis of this research, it would be conducted a comparison to the initial condition before the action to the first cycle then compared to cycle II and cycle III. It was said to be successful if each cycle always increased in the achievement. The result of this research could be seen in the score of before and after action after compared to always increase.

The procedure of Classroom Action Research included some steps: (1) preparation; (2) study/ first survey; (3) cycle implementation; (4) the preparation of report. Cycle implementation included: (a) planning; (b) acting; (c) observing; (d) reflecting.

The numbers of cycles planned were three cycles which was deemed sufficient to limit the problems occurred. Here are the designs of classroom action research procedure



Picture 1: Action reserach Kemmis and M.C Taggart model

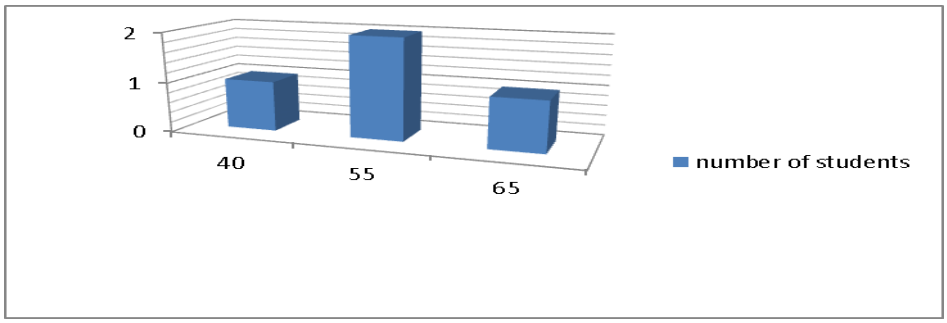
The steps of CAR implementation were done in 4 steps, 1) planning, 2) acting, 3) observing and interpreting, and 4) analyzing and reflecting.

3. Findings

The object of this reserach is early reading skill and interative multimedia. The Early reading skill on second class of SLB Autis Mitra Ananda Colomadu sub district Karanganyar regency before the action was still low. The result is described below:

Table 1: Early reading score before the action

No.	**Score**	**Frequency**
1.	40	1
2.	55	2
3.	65	1
	Average = 53,75	Number of students = 4



The table shows that early reading skill of the fifth grader SLB Autis Mitra Ananda still need the next teaching action by using interactive multimedia.

3.1 The result of cycle I

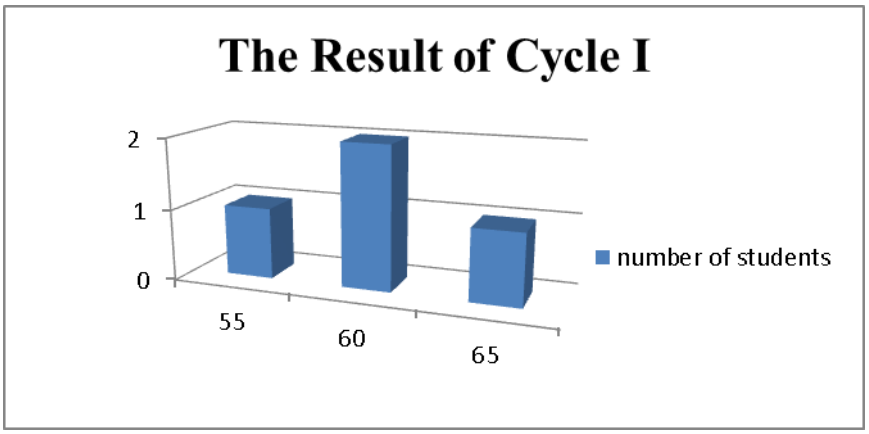
The result of early reading skill through interactive multimedia is reflected in the cycle below:

Table 2: Early reading score in cycle I

No.	Score	Frequency
1.	55	1
2.	60	2
3.	65	1
	Average = 60	Number of students = 4

3.1.1 Explanation

No students gains the passing grade >70, so that the learning has not reached the fruition yet.



Based on the analysis and reflection above, the action in cycle I is successful but it has not reached the maximum result yet. The improvement does occur in some indicators that have been determined in the first survey. However, the average score on students' reading skill is below the passing grade <70. So that, cycle II as the improvement of

learning process in cycle I needs to be implemented. Implementing the second cycle is approved by the teacher after the researcher proposes the analysis and reflection of first cycle. The second cycle implementation was done on November 01th 2016.

3.2 The result of cycle II

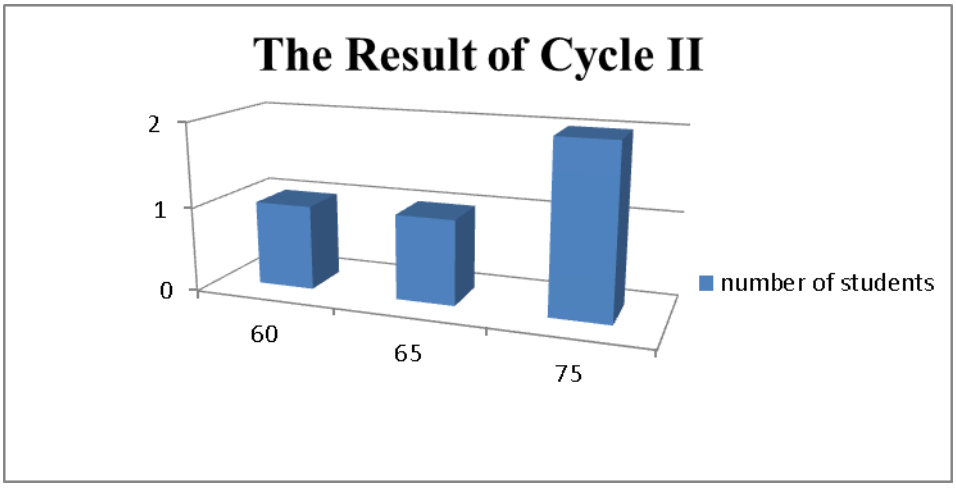
The result of early reading skill through interactive multimedia is reflected in the cycle below:

Table 3: Early reading score in cycle II

No.	Score	Frequency
1.	60	1
2.	65	1
3.	70	2
	Average = 66,25	Number of students = 4

3.2.1 Explanation

The result of the second action compared to early reading test score in cycle I, the class average score increases. The improvement of early reading test score by interactive multimedia is reflected in the table above. Students gaining the passing grade (scored ≥ 70) are 2 students. Therefore, students' percentage reaching the passing grade is 50%. Students' average scores is 70.



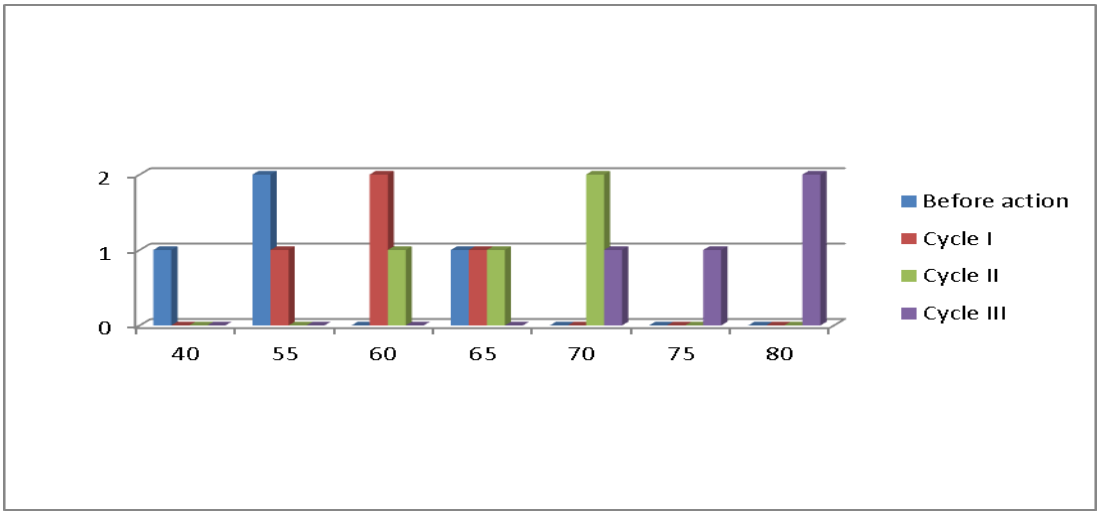
Based on the result of analysis and reflection above, the implementation of second cycle is successful but it has not reached the maximum result yet. The improvement does occur in some indicators compared to prior cycle. The class average score has reached the minimum passing grade and achieved the determined indicator, so that the cycle h as stopped and not continued.

4. Discussion

The finding of social science through Explicit Instructions in before and after action is compared in table below

Table 4: Early reading score before and after cycle

No	**Score**	**Before Action**	**Cycle I**	**Cycle II**	**Cycle III**
1	80	-	-	-	2
2	75	-	-	-	1
3	70	-	-	2	1
4	65	1	1	1	-
5	60	-	2	1	-
6	55	2	1	-	-
7	45	-	-	-	-
8	40	1	-	-	-
	Number of students	4	4	4	4
	Average	53,75	60	66,25	76,25



Thus, the score of prior condition and after action in each cycle always increases. It is seen from the average score obtained in prior condition before action 53, 75, cycle I 60, cycle II 66, 25 and cycle III 75, 25. Through the average score obtained in prior condition compared to every cycle is increasing significantly, so that students' learning success in early reading through interactive multimedia in teaching and learning process can improve students' learning outcomes.

5. Conclusion and Suggestions

5.1 Conclusion

The conclusion of the finding is the improvement of learning outcomes can be done through interactive multimedia in early reading learning on fifth grader of SLB Autis Mitra Ananda Colomadu sub district Karanganyar regency in the first semester academic year 2016/2017. It is signed by the students' average score obtained in learning early reading that always does improvement from before and after action in each cycle. The result is as follows: the average score of early reading material before action is 53.75, the average score of early reading in cycle II is 66,25, average score of early reading in cycle III is 76,25 and all students have achieved the passing grade 75

5.2 Suggestions

Dealing with the conclusion above, so the researcher proposes some suggestions as follows:

a. For teachers
   - Teachers should be more innovative in using appropriate media to be used in conveying the learning material.
   - Teachers should utilize the facility, especially visual aid and media that supports the teaching and learning activities.
   - Teachers who have not utilized the interactive multimedia in teaching and learning process can apply it to improve students' achievements.

b. Head master
   - School is expected to give instructional facility to teachers in order the learning process will be meaningful so that the goal is achieved.
   - School is expected to give chances to teachers to participate workshop, training, seminar so that teachers' ability will increase and their professionalism do too.

c. Further researcher
   - This research is expected to be reference to similar research even though time, location, and the context are different.
   - This research is expected to give contribution for other researchers in doing further research.

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