



## Using the Solite Kids Application to Improve the Syllable Reading Comprehension Ability of Mildly Mentally Impaired Students at Middle School Level SKh Madina, Serang City

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### Abstrak

Penelitian ini bertujuan untuk meningkatkan kemampuan pemahaman membaca suku kata tunagrahita ringan jenjang SMP dengan menggunakan aplikasi solite kids sebagai media pembelajaran. Penelitian ini menggunakan metode penelitian pre eksperimen dengan pendekatan kuantitatif dengan rancangan *One Grup Pre-test and Post-test* lalu diolah dengan uji Wilcoxon, subjek dalam penelitian ini berjumlah 3 orang siswa tunagrahita ringan jenjang SMP di SKh Madina Kota Serang. Teknik pengumpulan data yang diambil adalah berupa tes. Berdasarkan hasil analisis menggunakan uji Wilcoxon menunjukkan bahwa  $T_{hitung} = 6$  pada tingkat signifikansi 0,05 dengan jumlah  $n = 3$ , diperoleh  $T_{tabel} = 0$ , maka  $H_0$  ditolak karena  $T_{hitung} > T_{tabel}$ , artinya hipotesis yang diajukan dalam penelitian diterima. Hal ini menunjukkan bahwa ada peningkatan dalam kemampuan pemahaman membaca suku kata pada siswa tunagrahita ringan jenjang SMP di SKh Madina Kota Serang setelah menggunakan aplikasi Solite Kids.

**Kata kunci:** Aplikasi Solite Kids, suku kata, tunagrahita ringan

### Abstract

This study aims to improve the reading comprehension ability of mild intellectual disabilities junior high school students using the solite kids application as a learning medium. This study uses a pre-experimental research method with a quantitative approach with a One Group Pre-test and Post-test design then processed with the Wilcoxon test. The subjects in this study were 3 students with mild intellectual disabilities at junior high school level at SKh Madina, Serang City. The data collection technique used was a test. Based on the results of the analysis using the Wilcoxon test, it shows that  $T_{count} = 6$  at a significance level of 0.05 with a total of  $n = 3$ ,  $T_{table} = 0$  is obtained, then  $H_0$  is rejected because  $T_{count} > T_{table}$ , meaning that the hypothesis proposed in the study is accepted. This shows that there is an increase in the ability to understand syllable reading in students with mild intellectual disabilities at junior high school level at SKh Madina, Serang City after using the Solite Kids application.

**Keywords:** Solite Kids application, reading syllables, mild mental retardation

## **INTRODUCTION**

The American Association on Mental Deficiency (Ati, 2018:2) says that children with Mental retardation refers to a person's intellectual ability that is below average, followed by a lack of behavioral adaptation ability, where this occurs during the development period. Mental retardation has a classification based on its intelligence level, namely severe, moderate and mild. Suryani and Mumpuniarti (Arifin, 2022:19) said Based on their intellectual abilities, intelligence and social abilities of mild mentally retarded children have obstacles, but still have the ability to develop in academics, or cognitive abilities, adjustment in the social environment, and ability to work "

From the explanation above, mild mental retardation still has abilities that can be developed in academics even though the results are not as optimal as children in general. Educational service efforts that can be developed from mild mental retardation are reading, writing and counting. The process of academic learning for mild mental retardation students is functional or related to their daily activities. Learning to read for mild intellectual disabilities at the elementary level emphasizes initial reading learning related to daily activities. Prihandini (2018:19) said that because students with mild mental retardation need more time in the learning process than children in general, media is needed to support reading learning to make it more effective.

Based on the results of observations and interviews with teachers at SKh Madina, it was found that there were still mild intellectually retarded students at the junior high school level who still had difficulty reading syllables, while according to the 2024 Ministry of Education and Culture special education learning achievements, junior high school students had entered phase C, namely reading comprehension. During observations and statements from interviews with class teachers, it was found that teachers still tend

to use classical methods and lack of use of media in reading learning.

Seeing these problems, one of the things that needs to be fixed is the use of interactive media for reading lessons for students with mild intellectual disabilities, according to Vindiyani (2019: 3). the reason for using learning media can be directed to form new attitudes in learning. One of the media that can be used is the Solite Kids application media.

The Solite kids application is a technology-based application and online learning application that has existed since 2016. Chairunisa et al (2022:2) this application is an android based application in the form of an audio-visual application. The Solite kids application is also one of the applications that contains 90 educational game learning for children from kindergarten to elementary school. One of the features in this application is syllable learning, from one syllable, two syllables and three syllables. Thus, this study focuses on syllable learning for students with mild mental retardation using the Solite Kids application learning media.

## **METHOD**

The research method used is a quantitative approach method. According to Sugiyono (2019:129) quantitative method is defined as a method based on the philosophy of positivism, which is used to research a certain population or sample, data collection using research instruments, quantitative or statistical data analysis, and the aim is to test predetermined hypotheses. The type of research used is Pre Experiment, which is a research method carried out by experiment. The design form used by the researcher is "One Group Pre Test Post Test" This design was carried out because the researcher only involved the concentrated group.

Sugiyono (2019:88) states that variables are basically something that is determined by

researchers who are researched and studied so that they get information about it, and then conclusions can be drawn. In this study, the research variables are divided into 2, namely: independent variables (free), and dependent variables (bound). The variables in this study are as follows

- Independent variable: Solite Kids application
- Dependent variable: The reading comprehension ability of students with mild to moderate hearing impairment

In this study, a data collection instrument was used in the form of a checklist, the following is a breakdown of the research instrument.

Table 1.1 Research Instrument Grid

Aspect	Sub aspect	indicator	No	amount
Beginning reading skills	Reading patterned syllables	K-V	1-5	5
		V-K-V	6-10	5
		K-V-V	11-15	5
		KV-KV	16-20	5
		KV-KV-KV	21-25	5
Amount			25	25

The test in this study has assessment criteria that take into account the child's ability to read syllables, the assessment will vary from a score of 1 to the highest, namely 3.

## DISCUSSION

This research was conducted at SKh Madina, Serang City in the even semester of the 2023/2024 academic year. This research was conducted from May 27 to June 12, 2024. The subjects in this study were students with mild intellectual disabilities at junior high school level with a total of 3 people, namely HM, DN and AL. The research was conducted in 8 meetings, pre-test and post-test each 1 meeting and treatment as many as 6 meetings.

Before being given treatment, the researcher gave a pre-test to the students first, this was done to measure the students' initial abilities before the treatment was given. After that, the students were given treatment 6 times. Before conducting the research, the researcher prepared the instrument and teaching module, the instrument was used for the pre-test and also the post-test. After completing the treatment, the next step was the implementation of the posttest, the post-test was conducted to measure students' abilities after the treatment was carried out

Table 1.2 Pre test results

No	Student	Mark
1	DN	27
2	AL	30
3	HM	25
Amount		82

Table 1.3 Post test results

No	Student	Mark
1	DN	46
2	AL	63
3	HM	39
Amount		148

The table above is the overall results of the pretest and posttest reading syllables, the score above will be made into a diagram according to the aspects of the syllables studied, with the following totaled scores.

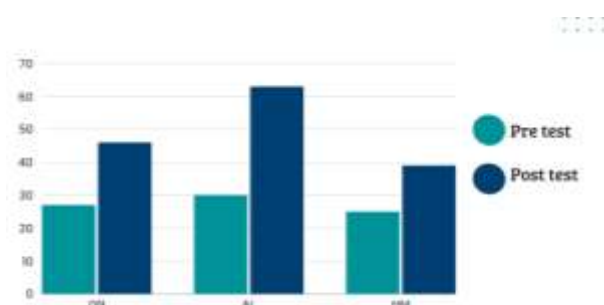


Diagram 1.1 Total score of pre-test and post-test

The diagram above is the total score from the pre-test and post-test results that the students have done. It can be seen from the difference in the pre-test and post-test scores that in learning syllables using the Solite Kids application provide significant improvements to student abilities.

Table 1.4 calculation using the Wilcoxon test on the use of the Solite Kids application to improve reading comprehension of syllables

Sampel Penelitian	Pre test	Post Test	D y1-X1	Rank (d)	Rank dengan Tanda	
	X1	Y1			Positif	Negatif
DN	27	46	19	2	2	0
AL	30	63	33	3	3	0
HM	25	39	14	1	1	0
Jumlah					6	0
					Thitung 6	Ttable 0

Based on the results of this study, it can be concluded that the application of problem-based learning models can improve the learning outcomes of Civics of students in class VIII A SMP Negeri 1 Cina, both in

Based on the calculation using the Wilcoxon test in the table above, it can be seen that there is no negative difference in the results of the pre-test and post-test of students. From the results above, Tcount = 6 is obtained, and considering the level of interest in this study is 0.05 with the number N = 3, and by formulating  $df = n - k$  or  $df = 3 - 2 = 1$  then  $df = 1$ , then Ttable 0 is obtained, therefore  $H_0$  is rejected.

Based on the results of the discussion above and looking at the results of the assessment that has been carried out, it can be concluded that the use of the Solite Kids application as a learning medium can have a significant influence on the reading ability of students with mild mental retardation. In line with the research that conducted by Ariesandy 2020 on children with multiple disabilities using the SECIL Solite Kids application To

improve initial reading skills, this study uses Single Subject Research, by using the ABA design, the results of this study explain that there is an increase in children's early reading abilities by using the SECIL Solite Kids application media.

## CONCLUSION AND SUGGESTIONS

### Conclusion

Based on the results of the research and discussion above, the use of learning media certainly has a great influence on improving students' learning abilities. The use of the Solite Kids application can improve the reading ability of syllables of mild intellectually retarded students at junior high school level at SKh Madina, Serang City. This is evidenced by the difference in scores during the pre-test and post-test conducted on students.

After using the solite kids application media for reading, students' reading ability increased because students achieved a final post-test score exceeding the pre-test score. The results of the scores obtained by students were then tested using the Wilcoxon test obtained with a level of importance of 0.05 with a number of  $n = 3$  and using the formula  $df = nk$  or  $df = 3 - 2 = 1$ , then  $T_{table} = 0$ , then  $T_{count} > T_{table}$ , therefore  $H_0$  is rejected. This proves that the use of the Solite kids application in improving the reading comprehension of syllables of mild intellectually retarded students at the junior high school level at SKh Madina has a significant influence.

### Suggestion

Based on the research that has been conducted, the suggestions that can be given for further research are as follows: For Students Students must always be enthusiastic and focused during learning, especially in reading learning because reading is a window to the world, practicing reading a lot can improve reading skills to be better For Teachers and Schools: Based on the research that has been conducted, teachers and schools must utilize learning media properly, and

reduce delivery with lecture methods, and utilize developing technology media. For Further Researchers: In improving students' reading skills, it must be supported with appropriate learning media according to student needs, and continue to seek and utilize the use of technology because it is more varied and also interesting for students.

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