



## The Effectiveness of the PowerPoint-Based Make A Match Interactive Learning Model for Improving Beginning Reading Skills for Children with Physical Impairment

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### Abstrak

Artikel ini membahas tentang peningkatan kemampuan membaca permulaan bagi anak tunadaksa di SLB Negeri 1 Harau dengan menggunakan model pembelajaran Interaktif *Make A Match* Berbasis *PowerPoint*. Model pembelajaran interaktif adalah pendekatan pembelajaran yang didalamnya terdapat keaktifan anak pada proses belajar mengajar sehingga anak tersebut dapat terlibat secara keseluruhan baik secara fisik ataupun mental. Penelitian ini menggunakan pendekatan kuantitatif dengan metode eksperimen yaitu *Single Subject Research* (SSR) dan Desain A1-B-A2, serta data dianalisis menggunakan visual grafik dengan cara memasukkan data dalam grafik yang kemudian dianalisis berdasarkan kondisi A1-B-A2. Hasil penelitian menggunakan model pembelajaran Interaktif *Make A Match* Berbasis *PowerPoint* dapat meningkatkan kemampuan membaca permulaan bagi anak tunadaksa di SLB Negeri 1 Harau.

**Kata Kunci:** *Make A Match, PowerPoint, Membaca Permulaan, Tunadaksa*

### Abstract

*This research aims to improve the initial reading skills of children with physical impairments at SLB Negeri 1 Harau by using the PowerPoint-based Interactive Make A Match learning model. The interactive learning model is a learning approach in which students are active in the teaching and learning process so that students can be fully involved, both physically and mentally. This research uses a quantitative approach with experimental methods, namely Single Subject Research (SSR) and A1-B-A2 Design, and data is analyzed using visual graphs by entering data in graphs which are then analyzed based on conditions A1-B-A2. The results of research using the PowerPoint-based Make A Match Interactive learning model can improve the initial reading skills of children with physical impairments at SLB Negeri 1 Harau.*

**Keywords:** *Make A Match, PowerPoint, Beginning Reading, Physically Impaired*



## Introduction

Physically disabled children have another term as children who have abnormalities in their body or are also referred to as physically disabled, resulting in a lack of function in their body parts in carrying out movements in everyday life. This limb disorder is related to muscles, bones, joints and nerves (Nurhastuti. 2019). A quadriplegic is a person who experiences permanent disorders or abnormalities in movement organs such as bones and muscles (Subini, 2014). Physical impairment is a disorder that an individual has, such as an obstacle in the performance of locomotion, so that special treatment or action is required so that the individual can carry out activities (Resna & Nurhastuti, 2024). Children with physical impairments can be at risk of disrupting growth and development in childhood, adolescence and adulthood. Every child, whether he has special needs or not, will continue to grow and develop optimally according to his genetic potential (Nurhastuti et al, 2019). Children with disabilities have difficulty in moving in everyday life, as a result of this disability individuals face various problems both in terms of education, social, emotional and in terms of work. Due to these educational limitations, they will experience difficulties in participating in learning at school, one of which is learning Indonesian, namely beginning reading. Reading is an activity of recognizing letter shapes and making grammar and understanding the meaning of letters that are arranged into words and sentences, both directly and indirectly (Nurhastuti et al, 2023).

In learning to read at the beginning, children will learn to recognize letters which differ in name and shape. These letters consist of vowels and consonants which are pronounced according to their sound. Then the child will be introduced to the next steps, namely spelling syllables, reading words, and reading a short sentence. (Janawati, D. P. A. (2020). Reading is an ability that must exist in

individuals in order to obtain information in life. Reading cannot be separated from the process that individuals will go through in their lives. (Zulmiyetri, Mega, & Rahmahtrisilvia, 2023). If children Not being able to read can result in children's abilities being left behind in the field of education and children will find it difficult to obtain information. If teachers are able to provide special attention and appropriate learning models that can be given to children with special needs, thus making them able to absorb learning like other children.

Based on a preliminary study conducted at SLB Negeri 1 Harau, a child in class X SLB was found to be disabled. Obstacles The child's physical impairment occurs in the right hand, making it difficult to carry out activities with the right hand and the child writing using the left hand. The problem with this child is that he is not yet able to read at first. The child's ability is being able to read vowels, consonant letters and also being able to read the alphabet A-Z. To read words with a KV-KV pattern, children have difficulty reading them, children can only spell the KV-KV pattern but to combine syllables into words, children have difficulty because children often doubt what they have read before.

Based on this information, the author is interested in conducting an intervention using the PowerPoint-based Make A Match Interactive learning model to improve beginning reading abilities. The PowerPoint-based Make A Match interactive learning model is a learning model designed by inviting children to look for an answer to a question given by the teacher or find a partner for a given concept. In this model, PowerPoint is used as a helpful medium in carrying out learning using Make A Match. . Microsoft PowerPoint, often referred to as PowerPoint, is software commonly used by individuals to create attractive and informative visual presentations by designing presentation materials in the form of slides. Every program created certainly

has a clear objective, and PowerPoint is no different (Hasanah N. 2020.). According to (Najamuddin, M. 2021). The PowerPoint program has various functions and benefits for people who use it. One of the benefits obtained is that someone can make the presentation of material more impressive and enjoyable. PowerPoint can also be edited according to the user's wishes, because the features in PowerPoint are very diverse. This feature can also be useful for those who want to use it.

The advantages of the PowerPoint-based Make A Match Interactive learning model according to (Nurfiati, N et al, 2020) Can improve children's ability to learn, children are more active in learning, a fun learning model, can increase children's ability to receive learning material.

## Method

This research uses a quantitative approach with experimental methods. Experimental research is used to identify possible symptoms or events that may arise as a result of treatment of the subject being studied. The experimental method applied in this research is Single Subject Research (SSR). Single Subject Research (SSR) aims to evaluate the effectiveness of an intervention or drug given. The intervention provided is measured by how much influence it has in the form of a percentage (Indra, 2021). In this study, the intervention that was measured was intervention using the make a match interactive learning model to assist in aspects of Indonesian language learning, namely beginning reading. The writing design used is a reversal design with the type A-B-A. According to (Juang Sunanto et al, 2006:59) The A-B-A design is a development of the A-B design, the A-B-A design has shown that there is a causal relationship between the dependent variable and the independent variable. The basic procedure is not much different from the A-B design, only there is a repetition of the baseline phase. Initially the target behavior is measured continuously in the baseline

condition (A1) for a certain period of time then in the intervention condition (B). The addition of the second baseline condition (A2) is intended as a control for the intervention phase so that it is possible to draw conclusions about the existence of a functional relationship between independent variable with dependent variable.

The A-B-A design in this Single Subject Research (SSR) research is divided into 3 stages, namely Baseline (A1), Intervention (B), Baseline (A2). In the first stage, Baseline (A1), namely the initial condition without any treatment or intervention at all, in the second, namely (B), namely providing treatment or providing a PowerPoint-based Interactive Make A Match learning model in the learning process, and in the third, Baseline (A2), namely the condition children without being given treatment or without providing intervention with the PowerPoint-based Make A Match interactive learning model. The subject of this writing is a boy with the initials A in class.

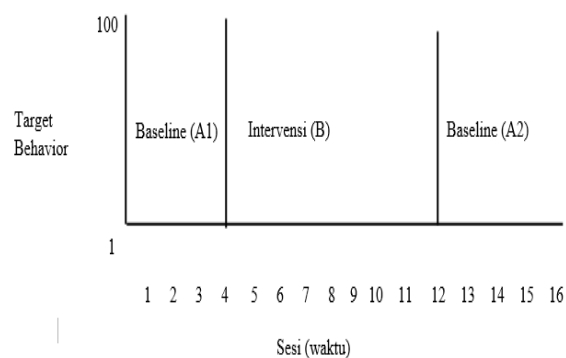


Figure 1 Graph of Single Subject Research (SSR) Writing Procedure

## Results and Discussion

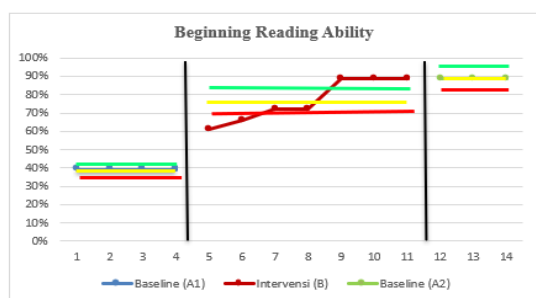
In research that was conducted in 14 meeting sessions, there were 3 session stages carried out to obtain data, namely: baseline 1 (A1) was carried out in 4 meetings, (B) intervention was carried out in 7 meetings, and (A2) baseline 2 was carried out 3 meetings.

Baseline 1 (A1) data was obtained from observations of children with physical impairments in their initial reading abilities. In the Baseline condition, this was done 4 times with a percentage of 39%, 39%, 39%, 39%. As for Intervention (B), it was carried out 7 times with a percentage of 61%, 66%, 72%, 72%, 89%, 89%, 89%. Finally, at Baseline A2, there are percentage results of 89%, 89%, and 89%.

Based on data collected at 3 stages, namely baseline A1, Intervention B, and baseline A2, the author ended the observation because the data had stabilized at the last 3 meetings at baseline (A2).

The following is a summary of the percentages in 3 conditions: Baseline (A1), Intervention (B), Baseline (A2).

NO	Condition	A1	B	A2
1	Condition length	4	7	3
2	Directional trend estimation	(=)	(+)	(=)
3	Stability Trends	Stable (100%)	Unstable (28%)	Stable (100%)
4	Data trail tendencies	(=)	(+)	(=)
5	Stability level and range	Variable 39% - 39%	Variable 61% - 89%	Variable 89% - 89%
6	Level of change	50 - 50 = 0 (=)	89 - 61 = 28 (+)	89 - 89 = 0 (=)



Graph 1 Stability Trend Graph

<u>Information :</u>	
Baseline Data (A1)	:
Intervention Data (B)	:
Baseline Data (A2)	:
Mean level	:
Upper limit	:
Lower limit	:

In Figure 2, based on the data written in the graph, it shows that there is an influence on changes in initial reading abilities for children with physical impairments after being given treatment.

Table 1. Recapitulation in Conditions

Table 2. Recapitulation between Conditions

No	Condition	A1/B/A2
1	Number of variables changed	1
2	Changes in directional trends and their effects	(=)    (+)    (=)
3	Changes in stability trends	Stable - Unstable - Stable
4	Levels of change a. Level of change in condition B/A1 b. Level of change in condition B/A2	61%-39%= 22% 89%-61%= 28%
5	Overlap Percentage a. Percentage of overlap between A1 and B b. Percentage of overlap in conditions A2 and B	0% 57%

The problem in this research was in children with physical impairments in Class X SLB Negeri 1 Harau who had difficulty in beginning reading. Children are able to read vowels and consonants, but children have difficulty reading KVKV word patterns.

According to Fauhah et al, (2021) Teachers are influential in the learning

system because teachers do not only provide knowledge, but teachers are required to create a pleasant atmosphere to make learning take place more actively. The method or model used by the teacher certainly influences the progress of the child's learning process. If teachers use a model that involves children in learning more actively and diligently so that they have a pleasant atmosphere, learning will feel interesting and children will not feel fed up and bored, so using the right learning model will increase children's interest in learning. (Fauhah et al, 2021). The learning model that is suitable for use in this research after looking at the students' conditions and taking into account the principles of teaching and learning activities is the Make A Match interactive learning model (Mariyaningsih, N et al, 2018:16). The interactive learning model is a learning approach that facilitates children's active involvement in the learning process, thereby enabling them to be involved mentally and physically in the entire learning process (Eliana, N.2023). The interactive learning model is a learning approach in which children are active in the teaching and learning process so that the child can be fully involved both physically and mentally. The Make A Match learning model is designed as well as possible to create a pleasant learning atmosphere (Putra, N, T, E 2019). Make A Match is an interactive learning model that supports children in gaining a better understanding of the teaching and learning process. The PowerPoint-based Make A Match interactive learning model is a learning model designed by inviting children to look for answers to questions given by the teacher while playing or looking for a partner from a given concept, this model uses the game concept given by the teacher (Suprpta, D. N. 2020). In this research the author uses PowerPoint as a helpful medium in using the Make A Match interactive learning model.

The PowerPoint-based Make A Match interactive learning model caused a

change in child A's initial reading ability. This change was indicated by an increase in the graph for each condition, and it can be seen that there was an increase in initial reading ability in KVKV word patterns after the intervention was given compared to before the intervention was given.

Based on the discussion above, the research data results of the PowerPoint-based Make A Match Interactive learning model are effectively used to improve initial reading skills for class X SLB Negeri 1 Harau children with physical impairments.

### Conclusion

Based on the explanation above, it can be concluded that the use of the PowerPoint-based Make A Match interactive learning model can improve initial reading skills for class X SLB Negeri 1 Harau children with physical impairments. To optimize learning, it requires consistency for both children, teachers and parents throughout the learning process in order to get better results.

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