The Effectiveness of Alphabet and Picture Box Learning Media (KOFABAR) to Improve Beginning Reading Skills for Children with Cerebral Palsy

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Abstract
The purpose of this study was to examine the effectiveness of kofabar learning media to improve the ability of beginning reading for children with cerebral palsy. The approach used in this research is SSR with A-B-A design. The study was conducted over 14 sessions, divided into three phases, the first phase, baseline (A1), was conducted for 3 meetings, showing stable results with a score of 7%. The second phase, namely intervention (B), was carried out for 8 meetings, showing an increase with a score of 13% to 93% and showed stability at the 6th meeting to the 8th meeting. The last phase, namely baseline (A2), was conducted for 3 meetings, showing stable results with a score of 86%. These results indicate an increase in the ability to read beginning using kofabar learning media for cerebral palsy children.

Keyword: Alphabet and Picture Box Learning Media, Early Reading, Cerebral Palsy
Introduction

A disability is a physical or bodily disorder that results in a person being unable to perform required movements in accordance with the body's functions. There are several types of disability with motor impairments, including disability with abnormalities in the motor organs such as muscles, bones and joints, as well as disability with abnormalities in the nervous system such as abnormalities in the spinal cord and abnormalities in the brain or what is commonly referred to as cerebral palsy. (Nurhastuti, 2019)[1]. Cerebral palsy is a disorder that can be seen from weak muscles, posture, and unusual movements that will cause limitations in doing body activities. (Putri, 2022)[2].

Indonesian is one of the most important subjects in the Indonesian education system. This subject provides instruction in various language skills, such as reading, writing, composing, reading poetry, dictating, speaking, and narrating. (Nahdi & Yunitasari, 2019)[3]. Reading is an activity carried out by someone to interpret letter symbols in the form of sounds which are then combined into words and sentences so as to form grammar by understanding the meaning conveyed by the author. (Nurhastuti & Moriaarti Warjean Luke, 2023)[4]. In human life, reading plays a crucial role as individuals consistently acquire information to develop skills and knowledge in line with the advancements in science and technology. (Hilda Hadian et al., 2018)[5]. One of the media in learning to read is the alphabet and picture box or abbreviated as kofabar.

Kofabar media is a learning media in the form of a box in which there are 26 letters of the alphabet and the types of pictures and names that correspond to these pictures. The name of this picture is in the form of a short word consisting of KV-KVK patterned letter pronunciation. The advantages of this kofabar learning media are that it has an attractive shape with various forms of alphabet letters and colors made for consonant letters in red and vowels in blue and images of objects in the surrounding environment. (Hestinarini, 2021)[6]. Because of students’ problems, researchers want to help in beginning reading using kofabar learning media.

Research Methods

This study uses Single Subject Research (SSR) method with A-B-A design. This A-B-A design is divided into three phases, namely the baseline phase (A1), intervention (B) and baseline (A2)[7]. The research subject is a child with cerebral palsy. The data collection tool in this study involved observation and recording of students' abilities using a checklist.

Research Results

The research is divided into 3 phases, the baseline phase (A1) includes the ability of students in beginning reading before being given intervention. The intervention phase (B) is the beginning reading ability of students when receiving intervention using kofabar media. While the baseline phase (A2) is the students' beginning reading ability after the intervention is given.

The collected results were analyzed through graphic visual analysis. The data obtained is the baseline phase (A1) as many as 3 meetings getting results 7%, 7%, and 7%. The intervention phase (B) as many as 8 meetings got the results of 13%, 33%, 40%, 60%, 86%, 93%, 93%, and 93%. The baseline phase (A2) as many as 3 meetings got the results of 86%, 86%, and 86%. Can be illustrated through the graph below:

Graph 1 Recapitulation of A1 - B - A2
The table recapitulates the results of data analysis as follows:

### Table 1 Recapitulation of Analysis Results in Conditions

<table>
<thead>
<tr>
<th>No.</th>
<th>Conditions</th>
<th>A1</th>
<th>B</th>
<th>A2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Condition Length</td>
<td>3</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>Estimated Directional Trend</td>
<td>(=)</td>
<td>(+)</td>
<td>(=)</td>
</tr>
<tr>
<td>3.</td>
<td>Stability Trend</td>
<td>100% (stable)</td>
<td>12.5% (unstable)</td>
<td>100% (stable)</td>
</tr>
<tr>
<td>4.</td>
<td>Trend of Data Trace</td>
<td>(=)</td>
<td>(+)</td>
<td>(=)</td>
</tr>
<tr>
<td>5.</td>
<td>Stability Level and Range</td>
<td>Variables 7% - 7%</td>
<td>Variables 13% - 93%</td>
<td>Variables 86% - 86%</td>
</tr>
<tr>
<td>6.</td>
<td>Level of Change</td>
<td>7 - 7 = 0</td>
<td>93 - 13 = 80</td>
<td>86 - 86 = 0</td>
</tr>
</tbody>
</table>

### Table 2 Recapitulation of Intercondition Analysis Results

<table>
<thead>
<tr>
<th>No.</th>
<th>Conditions</th>
<th>A1/B/A2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Many variables change</td>
<td>1</td>
</tr>
</tbody>
</table>

2. Change in directional trend

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(=)</td>
<td>(+)</td>
<td>(=)</td>
</tr>
</tbody>
</table>

3. Change in stability trend

Stable - unstable - stable

4. Level of change
   a. Level of change in phase B/A1
   b. Level of change in phase B/A2

13% - 7% = 6%
86% - 13% = 73%

5. Data overlap
   a. In the baseline phase A(1) with the intervention phase.
   b. In the baseline phase (A2) with the intervention phase.

0%
50%
Discussion

Discussion of the results of research on the effectiveness of kofabar learning media to improve beginning reading skills for cerebral palsy children carried out by providing interventions using kofabar media at SLB Waraqil Jannah Paninjauan.

Beginning reading is an effort to equip preschool learners with reading skills through structured instruction. (Vladimir, 2015)[8]. The program focuses on words that have meaning in the learner's personal context, and uses engaging activities and media as a means to teach reading concepts.

Kofabar media is one of the tools that can assist students in beginning reading. Kofabar media is one type of learning media based on letters and images. (Ismawati & Widyawati, 2022)[9]. Kofabar media has an attractive shape, in which there are 26 letters of the alphabet and images labeled according to their names. (Riswandi et al., 2023)[10].

Based on the research conducted, it can be seen that the first phase, namely baseline (A1), was conducted for 3 meetings, showing stable results with a score of 7%. The second phase, namely intervention (B), was carried out as many as 8 meetings, showing an increase with a score of 13% to 93% and already showing stability at the 6th meeting to the 8th meeting. The last phase, namely baseline (A2), was carried out for 3 meetings, showing stable results with a score of 86%.

The results showed that the provision of sequential and repeated interventions using kofabar media can have an impact on the ability to read the beginnings of cerebral palsy children. This is in accordance with the results of research conducted (Ismawati & Widyawati, 2022) who examined the effect of kofabar media on the ability to read the beginnings of group B at RA Muslimat Babul Gumalan.

Based on the discussion above, it is proven that kofabar learning media is effective for improving the ability to read KV-KVK patterned words for grade V cerebral palsy children in SLB Waraqil Jannah Paninjauan.

Conclusions and Suggestions

Based on the results of the research and discussion conducted, it was found that the ability to read beginning increased when using kofabar learning media. This improvement is illustrated through a graph that shows the increase from the baseline phase (A1) to the intervention (B) and baseline phase (A2). However, this study still exhibits some limitations in both writing and research results. Therefore, we anticipate collaboration among schools, teachers, and parents to assist children in the process of beginning reading.

References


