Effectiveness of Using the Talk Box to Improve Early Children’s Communication Ability

Ineke Alriani a*, Arifin Ahmad a, Mustafa a and Ifa Safira b

a Department of Educational Science, Universitas Negeri Makassar, Indonesia.
b Department of Science, Universitas Bosowa Makassar, Indonesia.

Authors’ contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJESS/2023/v46i2/000

ABSTRACT

The talk box consists of the box and the object (learning material). Outside the talk box is a layer/pocket for storing things the child will learn. At the same time, the inside of the box is a storage container for objects children have studied. Children can choose the desired part of the object. Assessment of children's communication skills was conducted using an observation sheet by providing a checklist of aspects that, according to the observer's observations, were following the results or activities of children as measured through a performance test. The results of the observed children's communication skills followed the focus of the observations on the children's learning outcomes sheets on five aspects of the assessment, namely; 1) Proper pronunciation, 2) Sentence structure, 3) Vocabulary, 4) Fluency, and 5) Understanding. The data collection methods were observation questionnaires, tests, and documentation. In contrast, the sampling technique used was purposive sampling with a sample of 30 children at Mutiara Gowa Kindergarten and Al Fadiyah Gowa Kindergarten. The talk box application is declared effective in the classroom because it can improve children’s communication skills, especially at 5–6 years old.

*Corresponding author: Email: innekeyani66@gmail.com;
Email: arifin_unm@yahoo.co.id, mustafa@unm.ac.id, ifasafira8@gmail.com;

Keywords: Talk Box; effectiveness; learning outcomes.

1. INTRODUCTION

Speaking and listening in schools receive less attention, especially in media use. Using media that should be a reference for children to tell stories is still rare. As a result, children still have trouble pouring ideas, opinions, experiences, or knowledge they have into their speaking skills. Many children have ideas they want to convey through storytelling but have difficulties due to the lack of visual media [1,2].

1.1 Early Childhood Communication Skills

Jamaris in Suyadi (2017) describes the speaking ability of children aged 5-6 years as follows (a) children can already pronounce more than 2,500 vocabularies; (b) the scope of vocabulary that a child can say concerns color, size, shape and color, taste, smell, beauty, speed, temperature, difference, bandage, surface spacing; (c) the child can already perform the role of a good listener; (d) the child may participate in a conversation, and may listen to others and respond to the conversation; (e) the conversation had taken by the child of this age had concerned his various comments on what he saw; and (f) the child is already able to self-expression, write, read, and speak. Thus, a child of this age can already participate in a conversation, perform the role of a good listener, and express thoughts, feelings, and actions using simple sentences. Sonawat and Francis [3] suggest the characteristics of such developments are “The child begins to tell simple stories and long conversations. The child’s speech is understood by others most of the time. The child follows three steps or more complex directions. The child can pronounce most of the sounds, but he may not say “r,” “s,” or “the” sounds correctly [4,5]. The child begins to use adult grammar in his sentences. The child can understand 1500 to 2500 words by five years”.

1.2 Talkbox

Talkbox media is made of readily available materials, such as cardboard, story drawings, flannel, glue, scissors, crankcases, wrapping paper, and mica plastic, then shaped like a television that can be rotated to see pictures [6,7]. The purpose of using illustrated story box media is to find out objective conditions about children’s speech ability and to determine the implementation of the use of illustrated story box media in improving children’s speech skills [8]. The ability to speak is the process of using spoken language to express thoughts and feelings, reflect on experiences, and share information. Meanwhile, talk box media and illustrated stories are tools to convey a story to children [9,10].

The talk box used, namely the INKE (Inspirational, Creative, and Effective) talk box, is a non-electronic medium made from materials that are readily available, such as cardboard/boxes, images/photos of objects, flannel, glue, scissors, paper clippings, quarto paper, and plastic cards. This INKE talk box media aims to improve the communication skills of children aged 5–6 years. The objects used in this talk box media can be adapted to the learning theme where materials are readily available and often used as early childhood toys—examples: fruit picture cards, means of transportation, animals, fruits, stick ice, and others.

![Fig. 1. Talkbox INKE (inspirational, creative, and effective)](image-url)

1.3 Early Childhood Education (ECCE)

Early childhood development is a continuation of infancy (born until age 4), characterized by physical, motor, cognitive (changes in attitudes, values, and behavior), and psychosocial...
development, followed by other changes. Early childhood language development is essential. Perception, adaptation, imitation, and expression are in language development. The child must learn to understand all these processes, try to imitate them, and then only then try to express his desires and feelings. Language development in children includes phonological, vocabulary, word meaning, sentence-building, and pragmatic development.

Kindergarten (TK) is a form of early childhood education that organizes educational programs for children aged 4 to 6. In the implementation of learning in kindergarten, according to the Regulation of the Minister of National Education Number 58 of 2009, it covers five areas of development, namely language development, development of moral and religious values, cognitive development, physical development, and social-emotional development, the purpose of which is for students to obtain intellectual, social, and emotional stimuli according to their age level.

2. METHODS

The research method used in this study was all experimental (quasi-experimental) research to see the effectiveness of specific treatments against controlled conditions. The research design used quantitative research on the pre-experimental method type one group pretest-posttest (initial test-single group final test). The design of one group’s pretest-posttest design consisted of one predetermined group. In this design, two tests were carried out: one before treatment (the pretest) and one after treatment (the posttest).

\[ 	ext{Description} : O_1 \times O_2 \]
\[ O_1 : \text{Pretest Value} \]
\[ X : \text{Provision of Talking Box Media} \]
\[ O_2 : \text{Posttest Value} \]

3. RESULTS AND DISCUSSION

The results of the children’s communication skills were observed following the focus of observation on the child’s learning outcomes sheet on five aspects, namely: 1) Proper pronunciation, 2) Sentence structure, 3) Vocabulary, 4) Fluency, and 5) understanding.

1) The results of achieving children’s communication skills in the aspect of proper pronunciation.

Data on the results of children’s communication skills in proper pronunciation are presented in the following Table 1.

<table>
<thead>
<tr>
<th>Category</th>
<th>Proper pronunciation</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Well Developed</td>
<td>14</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>Develop As Expected</td>
<td>15</td>
<td>50,0</td>
<td></td>
</tr>
<tr>
<td>Starting to Develop</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Not Yet Developed</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data processing, 2022.

![Fig. 2. Pie chart showing correct communication skills in punctuation](image)
Based on Table 1, it can be seen that the achievement in the proper pronunciation of 30 children, 14 children (47%) are very well developed. It illustrates that the child can repeat or re-name objects that have been exemplified from the talk box according to their designation or the object’s name appropriately. Furthermore, as expected, there were 15 children (50%), meaning that more children had developed communication after pronouncing back from the talk box. Meanwhile, there is one child (3%) who is just starting to develop, namely by mentioning it again, even with the help of a teacher.

2) The results of the achievement of children’s communication skills in the aspect of sentence structure.

The results of achieving children’s communication skills on aspects of sentence structure can be presented in the following Table 2.

Table 2. Results of achieving children’s communication skills in sentence structure aspects

<table>
<thead>
<tr>
<th>Category</th>
<th>Sentence structure</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very well developed</td>
<td></td>
<td>17</td>
<td>57</td>
</tr>
<tr>
<td>Develop as expected</td>
<td></td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td>Starting to develop</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Not Yet Developed</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Primary data processing, 2022

Based on Table 2, it can be seen that the achievement of sentence structure from 30 children there are 17 children (57%) in the very well-developed category. It illustrates that the child can tell or convey objects studied in order or arranged. Furthermore, as expected, there were 13 children (43%), meaning that children could tell objects.

3) The results of achieving children’s communication skills in vocabulary aspects.

The results of observations of the development of children’s communication skills on aspects of vocabulary can be presented in the following Table 3.

Table 3. The result of achieving the ability to communicate aspects of vocabulary

<table>
<thead>
<tr>
<th>Category</th>
<th>Vocabulary</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very well developed</td>
<td></td>
<td>16</td>
<td>53</td>
</tr>
<tr>
<td>Develop as expected</td>
<td></td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td>Starting to develop</td>
<td></td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Not Yet Developed</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Primary data processing, 2022

In Table 3, it is described that in the vocabulary development of 30 students, there are 16 children (53%) in the category of very well-developed. It illustrates that the development of children’s vocabulary after using talk boxes, in general, is increasingly shown in the addition of vocabulary that can be spoken and conveyed to their friends and teachers. Furthermore, as expected, 12 children (40%) describe that learning with talk boxes adds to or can increase children’s vocabulary. For children’s communication development in this aspect, two children (7%) are starting to develop.

4) The results of achieving children’s communication skills in the aspect of fluency.

The results of observations on the development of children’s communication skills in the aspect of fluency can be presented in the following Table 4.

Fig. 3. Pie chart showing communication skills in sentence structure
Table 4. Achievement of communicating on the aspect of fluency

<table>
<thead>
<tr>
<th>Category</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very well developed</td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td>Develop as expected</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>Starting to develop</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>Not Yet Developed</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Primary data processing, 2022

Table 5. Results of achieving children’s communication skills in the understanding aspect

<table>
<thead>
<tr>
<th>Category</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very well developed</td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td>Develop as expected</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>Starting to develop</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>Not Yet Developed</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Primary data processing, 2022

Table 4 describes the development of children’s communication skills in the aspect of fluency of 30 children. There are 16 children (43%) in the very well-developed category. That illustrates that the child is fluent in re-pronouncing objects after using the talk box, shown in the child’s ability to pronounce or convey fluently without the teacher’s help. As for children who develop as expected, eight people (27%) and nine children (30%) are just starting to develop or are starting to be fluent in pronouncing and conveying their learning results.

5) The results of achieving children’s communication skills in the aspect of understanding.

The results of observations of the development of children’s communication skills in the aspect of understanding can be presented in the following Table 5.

Table 5 Describes the development of children’s communication skills in the aspect of understanding that out of 30 children, 13 children (43%) are in the very well-developed category. It illustrates that the child can already understand what is learned, as shown in their ability to understand the object learned from the talk box. As for children who develop as expected, eight people (27%) and nine children (30%) are just starting to develop or understand what is learned from the INKE talk box.
CONCLUSION

After the researcher discussed theoretical studies, field studies, and experiment tests related to the need for speech skills in early childhood, it can be concluded that the use of talk box media is declared effective in improving speech skills in early childhood, especially children 5-6 years based on the ability of proper pronunciation, sentence structure, vocabulary, fluency, and understanding. Moreover, talk boxes as an alternative to learning that can stimulate the development of children's communication skills through application in learning or hands-on practice.

CONSENT

As per international standard, parental written consent has been collected and preserved by the author(s).

ACKNOWLEDGEMENT

The author's thanks go out to all parties involved in this study. Especially to the principals, teachers, and students of Mutiara Gowa Kindergarten and Al Fadiyah Gowa Kindergarten, who were the subjects of this study. Hopefully, this research will be useful for readers, education, and non-educational researchers to advance the quality of Indonesian Education.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES


© 2023 Alriani et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
https://www.sdiarticle5.com/review-history/99666