The Effectiveness of Using Smart Box Media on Children Raudhatul Athfal Amal Bakti Muslimin Marihat Bandar Simalungun North Sumatra

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Abstract. *The content of this mini research is that there are 3 components contained in the smart box media, namely number, letter and image components whose function is to improve the quality of student learning. Its application in learning activities is very influential. The average percentage from research on 3 classes at RA Amal Bakti Muslimin is the image component 77.67%, the letter component 71.42%, the image component 71.42%. This research uses a case study research method.*

Keywords: *smart box media, children, north Sumatra*

Abstrak. *Adapun isi dari mini riset ini adalah komponen yang terdapat dalam media kotak pintar ada 3 yaitu komponen angka, huruf dan gambar yang fungsinya adalah untuk meningkatkan kualitas belajar siswa. Penerapannya dalam kegiatan pembelajaran sangat berpengaruh. Persentase rata-ratanya dari penelitian terhadap 3 kelas di RA Amal Bakti Muslimin adalah komponen gambar 77,67 %, komponen huruf 71,42%, komponen gambar 71,42%. Penelitian ini menggunakan metode penelitian studi kasus.*

Kata Kunci: *media kotak pintar, anak, sumatera utara*

Introduction

Children at the age level of 0-6 years are a fundamental educational period because the development of children in the future is determined by various stimuli provided from an early age. Permendikbud 146 in 2014 says that children can develop optimally, it is necessary to pay attention to aspects such as religion and morals that teach about good values and religion, physical motor aspects, namely developments that occur in the kinesthetic maturity of fine motor and gross motor of children, cognitive aspects are developments that occur in the maturity of the thinking process, language aspects are maturity that occurs in children's language such as vocabulary, social emotional aspects are the development of sensitivity, attitudes, and social and emotional skills, and the last aspect of this developmental art teaches about exploration, expression, and appreciation of art. In all these aspects are developed in accordance with the curriculum for early childhood, namely in the context of play (Madyawati, 2017).

Related to aspects of child development in terms of language, it is known that language according to Otto is the main thing that forms the basis of our daily perception, communication and interaction (Nur Laili et al., 2022). The early childhood curriculum needs to present learning that focuses on children's language development. There are two types of child language development, namely spoken language and written language. Both spoken and written language have expressive and receptive forms. Listening or providing information orally and reading or providing information in writing are receptive forms. Conversely, speaking and writing are expressive forms.

According to Cochrane Efal in Muslitaryanti, the stages of a child's reading development include the fantasy stage (magic stage), the self-concept formation stage (self-concept stage), the picture reading stage (bridging reading stage), the reading recognition stage (take-off reader stage), and the fluent reading stage (independent reader stage) (Darmadi, 2005). Based on these stages, children aged 5-6 years should be able to read pictures because in Permendikbud 146 of 2014, children are able to show early literacy by showing symbolic forms (pre-writing) and can make various forms of work such as making pictures with some scribbles or writing that is already in the form of letters or words (Madyawati, 2017).

Based on interviews with RA Amal Bakti Muslimin teachers regarding the increase in the number of students each year in the RA, researchers can conclude that the media used by teachers in the RA is very interesting so that it makes the school have a brand among the community and makes prospective parents of students interested in sending their children to the RA in the hope that their children can be educated properly at RA Amal Bakti Muslimin.

Method

This research is included in Classroom Action Research (PTK) which means research by taking action by researchers in their own classroom. This research was first introduced by Kurt Lewin in 1946. After that, it was developed by Stephen Kemmis, Robin Mc Taggart, and many others. The action that is deliberately raised is given by the teacher or based on the direction of the teacher which is then carried out by the students. In this case, the class means not bound to the notion of classroom, but a more specific sense. That is a group of students at the same time receiving the same lesson from the same teacher.

Result and Discussion

 A. Functions and components of the smart box

The components and their functions contained in the smart box made by researchers are (Mutiah, 2010):

 1. Number component:

There are bottle caps, ice cream sticks, egg nests, and used Yakult drink bottles utilized as number components.There are several components made of ice cream sticks, egg nests, used Yakult drink bottles, and bottle caps. Educate pupils in the following areas: a. number sorting from 1 to

20; b. number addition; c. differentiating between larger and smaller numbers; and d. fine motor skills training.

a. Teach students how to sort numbers ranging from 1 to 20
b. Teach kids to add numbers.
c. Teach students to discriminate between large and small numbers.
d. Improve kids' fine motor abilities.

2. **Letter components**

   include HVS paper, food wrappers, and colorful origami. Making letter components serves the purpose of introducing students to the alphabet.

   a. Teach kids to compose words.
   b. Teaching students to mention letters.
   c. Develop children's language abilities.

3. **Picture component**

   There is an image component composed of HVS paper with colored fruit images and repurposed snack wrappers. The functions of creating picture components are:

   a. Teach kids to recognize colors.
   b. Teach them to match fruit photos with their initial letters.
   c. Develop children's patience and cognitive skills.

B. **Tools and materials for making smart boxes**

   The tools and materials used by researchers in making smart boxes are:

   A. Used cardboard
   B. Masking tape
   C. Used snack wrapper
   D. Dobeltip
   E. Used yakult bottle
   F. Scissors
   G. Ice cream stick
   H. Used bottle cap
   I. HVS paper
   J. Used bottle.
   K. Origami paper
   L. Glue gun
   M. Fox glue
   N. markers
   O. Wax glue
   P. Pencil

C. **Application of smart box media**

In its application, the use of smart box media is very helpful for teachers in learning activities. In accordance with classroom action research directly conducted by researchers that the results of observations of all RA Amal Bakti Muslimin students are as follows:

1. Group B1 supervising teacher Umi Lilis

	Pemahaman Terhadap Huruf Abjad	Pemahaman Terhadap Gambar	Pemahaman Terhadap Warna	Pemahaman Terhadap Angka
	10	14	15	12
Persentase Capaian Siswa	10/16 x 100 = 62,5 %	14/16 x 100 = 87,5 %	15/18 x 100 = 83 %	12/16 x 100 = 75 %

2. Group B2 supervising teacher Umi Leli

	Pemahaman Terhadap Huruf Abjad	Pemahaman Terhadap Gambar	Pemahaman Terhadap Warna	Pemahaman Terhadap Angka
	11	13	12	15
Persentase Capaian Siswa	11/16 x 100 = 68,75 %	13/16 x 100 = 81,25 %	12/16 x 100 = 75 %	15/18 x 100 = 83 %

3. Group B3 supervising teacher Umi Eva

	Pemahaman Terhadap Huruf Abjad	Pemahaman Terhadap Gambar	Pemahaman Terhadap Warna	Pemahaman Terhadap Angka
	15	14	15	12
Persentase Capaian Siswa	15/18 x 100 = 83 %	14/16 x 100 = 87,5 %	15/18 x 100 = 83 %	12/16 x 100 = 75 %

D. The influence of smart box media on school image

The influence of smart box media on the image of RA Amal Bakti Bakti Muslimin school is:

1. The use of smart box media shared to social media makes the quantity of students increase every year. Evidenced by the 20% increase in students from the previous year.
2. Increase concentration on students during learning activities.
3. Forming a quality generation that will affect the child's further studies, resulting in a good image for the school.

Conclusion

Berdasarkan hasil dan pembahasan yang telah dipaparkan dapat disimpulkan bahwa pembelajaran dengan berbasis masalah (*problem based learning*) efektif dan cocok untuk

diterapkan di anak dengan usia 5-6 tahun. Secara umum, pembelajaran di pendidikan anak usia dini menggunakan tahapan-tahapan seperti pada syntax model *problem based learning*. Dengan model pembelajaran ini anak dapat belajar sambil bermain secara efektif. Pada syntax 1, Anak mengamati video pembelajaran yang ditampilkan pada layar di depan kelas. Melalui pengamatan video anak mengetahui materi pembelajaran

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