Clothing Pattern Media Development in Simple Sewing Lessons to Develop Fine Motoric Children Aged 5-6 Years

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ABSTRACT
The use of appropriate learning media in kindergarten can develop children's abilities well, but on the other hand, if the use of media is less attractive to children, children will quickly get bored and no longer interested in the learning provided by the teacher. The fact that there is learning in kindergarten, namely (1) the media used by teachers is still not varied; (2) the learning models and methods are less attractive; (3) and early childhood children prefer learning media in the form of a game that can be played by children directly, but the available media is only shown by the teacher. The purpose of this research is to develop learning media for clothes patterns that can be used in learning simple sewing to develop fine motor skills for children aged 5-6 years.

Keywords: Dress Patterns, Simple Sewing, Fine Motor Early Childhood

1. INTRODUCTION

Early childhood in Kindergarten (TK) institutions are in the preoperational stage which relies on direct experience. Therefore, the uniqueness of early childhood learning is through direct activities or activities and is related to their interests and experiences. In this regard, teachers as educators can facilitate through activities that provide opportunities for children to carry out activities to meet their development needs. Early childhood likes to know, identify, hold, imitate, play objects in the surrounding environment, so educators need to facilitate with playing media that is interesting and fun for children.

Early Childhood Education in the 2013 Curriculum aims to encourage the optimal development of students through meaningful and enjoyable learning experiences. Early childhood education provides efforts to stimulate, guide, nurture and provide learning activities that will produce children's abilities and skills. The goal of early childhood education is so that children are able to manage their body skills including gross motoric movement and fine motor skills, as well as being able to receive sensory stimuli (Sujiono, 2009). The age of 0-8 years is called the golden age where all aspects of development lead to maturity, one of which is the aspect of physical motor development of children. Early Age Children included who are experiencing important periods in their development (Kustiawan, 2016).

Physical motor development of early childhood is defined as the development of elements of maturity and controlling body movements in children. Physical motor development of children will affect their lives directly or indirectly. According to Hildayani (2007: 8.3), physical development is the growth and change that occurs in a person's body or body. Human physical development occurs following the cephalocaudal principle, namely that the head and upper part of the body develop first so that the upper part appears larger than the lower part. According to Hurlock (1998: 114), physical growth and development will affect the child's view of himself and his view of others. The physical development of the child will also determine the child's skills in movement.

Physical motor development is divided into two, namely gross motoric and fine motoric. According to Yamin & Sanan (2010) a child's gross motor skills will develop according to the child's age, so that adults do not need to force the child's motor growth, as children aged 6 months cannot sit alone so that the child does not need to be forced to sit on a chair. In addition, according to Yamin & Sanan, there are several activities that can be done to improve children's gross motor skills, namely: looking for trails, walking up and down stairs, playing
tunnels and others. Sewing is a finger tool that requires coordination between the eye and the hand (Sudono, 1995). Meanwhile, fine motor skills are the ability to develop the motion of the fingers, especially the index and thumb, for example: holding, grasping, tearing, and cutting.

Physical motor development is closely related to motor intelligence in children. The use of appropriate learning media in kindergarten can develop children's abilities well. The teacher must be able to facilitate students through hands on activities (Asmawati, 2008). And vice versa if the use of media is less attractive to children, children will quickly get bored and no longer interested in learning provided by the teacher. The appearance of symptoms of boredom in children can be identified as several factors causing the following problems, namely (1) the media used by the teacher is still not varied; (2) the learning models and methods are less attractive; (3) and early childhood children prefer learning media in the form of a game that can be played by children directly, but the available media is only shown by the teacher. As an alternative to problem solving, learning media is needed that makes children interested in holding and playing it and can develop imagination and thinking freedom for children.

Learning media is anything that is used by the teacher to convey subject matter to students so that students are interested in their interests and attention, stimulated by thoughts and feelings, in the learning process to achieve learning objectives (Kustiawan, 2017). Media has the use of overcoming the diversity of students' backgrounds so that the media can provide stimulation, experience, and cause the same perception (Sadiman et al., 1986). Based on the results of interviews with several PKK Bandulan Kindergarten teachers in Sukun District, Malang City, they stated that: (1) learning activities to develop fine motor skills of early childhood by utilizing various patterns of clothing as a play tool have never been done in the kindergarten where they teach, (2) The teacher agrees that learning media are developed for various clothing patterns in simple sewing lessons to develop fine motor skills of children in their place of teaching.

2. METHOD

The research method carried out in the PKK Kindergarten, Bandulan Village, Sukun District, Malang City used Research & Development (R&D). R&D is one popular method to measure the effectiveness of the product (Sugiyono, 2011). The research and development of this clothing pattern design uses the development procedure according to Borg and Gall which consists of ten steps (Boedijono, 2013). But the ten steps proposed by Borg and Gall are not standard steps that must be followed absolutely (Akbar, 2013). Of course, each researcher can choose and determine the steps that are most appropriate for him based on the special conditions he faces in the development process (Ardhana, 2002: 9).

Therefore, in current research and development in the situation and conditions of the Covid-19 pandemic carried out in Class B, PKK Bandulan Sukun Kindergarten, Malang city, the researchers made modifications to seven steps, while steps eight, nine and ten were not implemented. The seven steps include: (1) conducting research and gathering information (literature review, classroom observations, preparation of reports on the subject), (2) planning (defining skills, formulating objectives, determining teaching sequences, (3) developing product forms. The initial pattern of clothes was followed by an evaluation from the experts, (4) conducting a small group trial at the start of the first Class B (B2), which initially used 6-8 subjects, because the pandemic period was simplified using 3-4 subjects, (5) revising the initial product (according to suggestions from the results of the initial small group trial), (6) conducting a large group field test which was originally with 10 - 20 subjects adjusted for the condition using 6 - 10 subjects in Class B Kindergarten, (7) revising operational products (product revisions based on suggestions from the main field test results).

Data analysis techniques are qualitative and quantitative analysis techniques in the form of percentages. Qualitative analysis is used to analyze data collection from experts using qualitative data. Quantitative analysis in the form of a percentage is used to percentage the results of data collection in the initial research (analysis of needs from experts), the results of small group trials and the results of field trials (large groups).

3. RESULT

The products developed in this research and development are learning media for clothes patterns in
learning simple sewing to develop fine motor skills for children aged 5-6 years, below are the evaluation data from experts, the results of small group trials, and the results of field trials (large group).

The results of the reviews from the experts are used as the basis for making an initial revision of the design of the learning media product for the clothing pattern that was developed. The review was conducted by 3 experts, namely one early childhood learning expert, one early childhood learning media expert, and one early childhood physical-motoric expert. The expert review aims to determine the suitability of the product being developed with existing needs in the field. The results of development research based on quantitative data analysis obtained a percentage of 89.58% from early childhood learning experts, and 87.5% from early childhood learning media experts, and 83.33% from early childhood physical-motoric experts.

In general, the evaluation data according to the experts obtained the following results (Table 1).

### Table 1. Overall Data Evaluation Results of Experts

<table>
<thead>
<tr>
<th>No</th>
<th>Evaluation Expert</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Early Childhood Learning Expert</td>
<td>89.58%</td>
</tr>
<tr>
<td>2</td>
<td>Early Childhood Learning Media Expert</td>
<td>87.5%</td>
</tr>
<tr>
<td>3</td>
<td>Early Childhood Physical-Motoric Expert</td>
<td>83.33%</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>86.80%</td>
</tr>
</tbody>
</table>

From the overall data from the evaluation of the experts, an average percentage of 86.80% was obtained. Based on the eligibility criteria, the learning media for clothing patterns for learning simple sewing can be said to be very valid or suitable for use.

The results of small group trials on the initial product of learning media for clothing patterns for learning simple sewing were obtained from observations about the aspects of ease, attractiveness and safety of children in activities using clothing patterns learning media for learning simple sewing carried out by the classroom teacher with the subject of 3 children in group B TK PKK, Bandulan sub-district, Sukun district, Malang city. The results of small group trial data analysis in the development of instructional media for clothing patterns in simple sewing lessons carried out by group B class teachers. Based on the overall data from the small group trial results, an average percentage of 86.66% was obtained. From the criteria used, it can be said that the learning media for clothing patterns for learning simple sewing is very valid or suitable for use.

**Figure 1** Small Group Trial Activities in Class B PKK Kindergarten, Bandulan Village, Sukun District, Malang City.

Based on the overall data from the small group trial results in PKK Kindergarten, it was obtained an average percentage of 88.66%. From the criteria used, it can be said that the pattern of clothes in simple sewing learning is very valid or suitable for use. Thus it can be said that the pattern of clothes in simple sewing learning is very feasible to be used to develop fine motor skills of early childhood and researchers can continue to the field trial stage (large group).

Furthermore, the results of the field trial stage (large group) carried out with the subject of 10 children of group B TK PKK, Bandulan village, Sukun sub-district, Malang city. The results of field trials (large groups) were obtained from the average of observations related to the aspects of ease, attractiveness, and safety of children in the use of instructional media for clothing patterns in simple sewing lessons carried out by group B class teachers.

**Figure 2** Field Trial Activities in Class B PKK Kindergarten, Bandulan Village, Sukun District, Malang City.

The results of field trial data analysis (large group) in the development of learning media for clothing patterns in learning simple sewing in Group B TK PKK, Bandulan village, Sukun sub-district, Malang city related to the aspect of convenience, obtained a percentage of 80% of easy children using learning media for clothing patterns in learning Simple sewing, related to the attractiveness.
aspect, obtained a percentage of 100% of children interested in using learning media for clothing patterns in learning simple sewing, and related to the security aspect, it was obtained a percentage of 100% of children safe in using learning media for clothing patterns in learning simple sewing. Based on the overall data from the results of field trials (large groups) obtained an average percentage of 93.33%, from the criteria used it can be said that the learning media for clothing patterns in learning simple sewing is very valid or suitable for use. In general, field trial data (large groups) at PKK Kindergarten obtained the following results (Table 2).

Based on the overall data from the results of field trials (large groups) obtained an average percentage of 93.33%, from the criteria used it can be said that the pattern of clothes in simple sewing is very valid or suitable for use. Thus, it can be said that the pattern of clothes in simple sewing is very suitable to be used to develop fine motor skills in early childhood.

4. DISCUSSION

This research and development resulted in learning media products for clothes patterns in simple sewing to develop fine motor skills of children in group B of the PKK Kindergarten, Bandulan Village, Sukun District, Malang City. The instructional media for clothing pattern design is a development of the clothing pattern media which is usually made of thick yellow cardboard (deluan), the size of which is the size of a human shirt which is actually modified and reduced in size according to the needs as a play tool for children.

The products developed are patterns of children's clothes, adult clothes in the form of dresses and batik clothes made of thick duplex paper covered with wrapping paper whose decorative motifs are adjusted to the shape of the dress pattern, tools for sewing are cloth ribbons of various colors, with sizes according to the type of dress pattern. This shirt pattern is two-dimensional in shape which is used as a medium for learning and playing in simple sewing learning activities according to the types of activity themes in the PKK Bandulan kindergarten institution. Sewing techniques need to be adjusted with several aspects as needed to produce appropriate results (Ernawati, 2008). In this activity, a simple sewing technique was chosen so that it was practiced by the students. Playing is a natural expression of children's feelings, as well as an attempt to express their desires and fantasies (Musfiroh, 2008). This is in line with the opinion of Sudjana (2010) which states that the use of media in learning is not an additional function, but has its own function as a tool to create an effective learning situation; and is an integral part of the overall learning situation. This means that learning media is one of the elements that must be developed by the teacher. Sewing learning media are classified as simple learning media (Kustiawan, 2016). teachers are expected to be able to take advantage of learning media, especially in thematic subjects and other subjects (Ramadani & Kustiawan, 2017).

Clothing pattern design learning media are designed and made to be used as an attractive and interactive early childhood play tool in learning simple sewing to develop children's fine motor skills. This is in line with the opinion of Mayke (1995) which states that educational game tools are games that are deliberately designed specifically for educational purposes. Meanwhile, educational games for kindergarten children are games that are deliberately designed for the purpose of improving the developmental aspects of kindergarten children. And also according to Hutauruk (2008), sewing is an activity that can improve fine motor skills of early childhood. One of the factors supporting the implementation of sewing exercises is the support from various parties involved. In this case, schools and teachers have important roles (Sukmawati, 2018).

5. CONCLUSION AND SUGGESTION

5.1. Conclusion

The development product in the form of instructional media for the design of this shirt pattern has gone through a fairly long process. The process starts from initial research, making product designs until the final product is completed which requires several revisions from experts (one early childhood learning expert, one learning media expert, and one early childhood physical-motor material expert) to get a product that is maximum, small group trials, and field trials (large groups).

On the basis of the results of preliminary research, a product design for the development of children's fine motor skills in learning simple sewing was compiled in the form of learning media for clothing pattern design. After the design is evaluated by experts, it gets the following suggestions and input:

5.1.1. From early childhood learning experts

From early childhood learning experts; (1) the size of the dress pattern design should be minimized due to the limited completion time for simple sewing activities; (2) the distance between one hole and the other in the shirt pattern is not too close because it is related to the ease with which children can insert cloth tape into the hole on
the edge of the shirt pattern as a substitute for needles and threads in simple sewing.

### 5.1.2. From an expert on early childhood learning media

From an expert on early childhood learning media; (1) the size of the pattern can be reduced the same as the advice of learning experts regarding the completion time in simple sewing activities, (2) the types of decorative motifs on the coating paper of the clothing patterns are adjusted to the type of clothes, meaning that the decorative wrapping paper motifs to coat the patterns of children's clothes are distinguished by the motifs. ornamental wrapping paper to cover the pattern of clothes for adults in the form of a dress or batik shirt.

### 5.1.3. From the material experts in the physical-motoric

From the material experts in the physical-motoric field of early childhood, suggestions and input were obtained, namely; To facilitate the movement of the child, inserting the cloth tape into the hole so that the end of the cloth tape is wrapped with insulation, this is because it is related to the nature of the fabric tape which is limp, easy to fold, it is difficult to insert it into the hole of the shirt pattern, but if the end of the tape is wrapped with insulation the ends can be straight and hard so make it easier for children to insert into holes during simple sewing practices.

After a revision is made to the product design, the initial product is then tested. In the small group trial, a percentage of 80% of children easily used learning media for clothing pattern design, related to the attractiveness aspect, a percentage of 80% of children were interested in using learning media for clothing pattern design, and related to the safety aspect, 100% of children were safe in using media learning dress pattern design. From the results of the small group trials that have been carried out, there are several things that need to be revised, namely; (1) for the expected pattern is not too big and difficult. (2) for the holes not too many and not close together.

In the field trial (large group), a percentage of 80% of children easily used learning media for clothing pattern design, related to the attractiveness aspect, it was obtained that a percentage of 100% of children were happy to use learning media for clothing pattern design, and related to the safety aspect, it was obtained a percentage of 100% safe children in using instructional media for clothing pattern design.

After going through the steps as mentioned above, the learning media for the design of the clothes pattern developed are suitable for use in learning simple sewing to develop fine motor skills for children aged 5-6 years.

### 5.2. Suggestion

Based on the conclusions, several suggestions were put forward from the researcher in relation to the learning media product for the design of the clothing pattern being developed. Suggestions put forward include: 1) Utilization Suggestions; The use of this product for developing instructional media for clothing pattern design needs to consider the situation, age, and level of child development; This product is intended for group B children in TK PKK, Bandulan sub-district, Sukun sub-district, Malang city, but this product can be used in other schools according to the sub-theme presented, and can be applied in lower classes with a level of difficulty adjusted to the level of development child; 2) Suggestion for Dissemination; Before being disseminated, this product should be re-evaluated and tested for its effectiveness, and disseminated to related parties such as the Education Office, GOP TKI, IGTKI, HIMPAUDI, IGRA and to other schools around to obtain recognition and permission for the use of pattern design learning media clothes; 3) Suggestions for Further Development; for early childhood education institutions, the form of learning media for the design of clothing patterns can be further developed in accordance with the characteristics and level of child development; for teachers or educators, it should be used as a play activity in teaching and learning activities in the form of games that are easy, fun and safe for children, and in accordance with the characteristics of children aged 5-6 years; after the covid-19 pandemic ends, it can be done for children on a broader subject by taking into account the age of the perpetrator; For further researchers who want to deepen the development of instructional media for clothing pattern design, it is suggested to develop it more broadly, because the results of this development are limited to the themes and areas of fine motor development only by examining the convenience, attractiveness and safety of children, not to study the effectiveness of product use. developed, so that further research can be carried out aimed at examining the effectiveness of using instructional media for clothing pattern design.

### REFERENCES


