



Practical Life Skill Based E-Book: Developing Fine Motor Skill Stimulation Book for Children

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Abstract. Implementation of fine motor activities in early childhood must be in accordance with the task requirements and stages of the child's development. However, in reality teachers still have difficulty finding the right references. The aim of this research is to develop a teacher's guidebook based on practical life skills to stimulate fine motor skills in early childhood. This research uses the Borg and Gall model with stages starting from initial information collection to product revision. Data collection techniques using open questionnaires on needs analysis and instrument validation by media, material and user experts. The data analysis used at the needs analysis stage is descriptive qualitative and the validation results use quantitative data analysis. Based on the results of instrument validation, a score of 3.4 was obtained or in the adequate category. Suggestions for improvements resulting from expert validation will be used to revise the product to make it better and more appropriate for teachers to use.

Keywords: Practical Life Skill, Fine Motor Skill, E-Book.

1 Introduction

Fine motor skills are one aspect of development in early childhood. It's important to start working with children on building their fine motor skills early on. Fine motor skills are the types of skills performed using small groups of muscles necessary to move objects [1]. However, in some studies, the definition of fine motor skill has been expressed as small muscle movements requiring close hand-eye coordination [2]. Fine motor skills is an ability that requires movement of the skills of small muscles in the body such as the skill of using fingers and wrists and good hand-eye coordination [3].

Fine motor skills is beyond grapho-motricity, other clusters involved are dexterity, manipulation of small objects, and speed-dominated skills in simple and very likely repetitive movements [4]. From several aspects of development above, researchers are interested in examining fine motor development in children. What is meant by the fine motor is the child's ability to show and master beautiful muscle movements in coordination, dexterity and dexterity in using hands and fingers [5].

Fine motor skills will develop and improve as they move through childhood. Developing fine motor skills in early childhood education helps build the foundation for important future skills like writing and self-care. Developing fine motor skills is one

of the most important early school learning skills when it comes to writing [6]. It has also been studied the importance of the transition to school, where fine motor skills become crucial for writing. These fine motor skills is related to the length and quality of children's writing [7]. Especially in a classroom context, fine motor skills feature prominently in young children's daily activities –in fact, an observational study of Head Start and kindergarten classrooms showed that between 27%-66% of the school day is de- voted to fine motor activities [8].

Fine motor skills form the foundation of many day-today activities in the early stages of life, such as eating, drawing, and dressing. Mastery of fine motor skills from an early age will influence their ability to carry out daily activities which specifically involve hand-eye coordination. The ability to take care of oneself is a learning process and slowly makes children more independent in facing life when they grow up [9].

Fine motor skills are one of the main priorities that must be developed properly from an early age. Through innovative learning to students so that it is not boring and attracts children's interest in learning. Improvement of fine motor skills in children is specific to practice of fine motor skills, even in an education oriented household [10]. One of the stimulation that can be given to children is through practical life skills from the Montessori approach. Practical life is an environment that is ready to emphasize basic daily motor activities [11]. Practical life exercises also defining can help children develop control and coordination of children's movements, both throughout the body or gross motor skills, and also hands or fine motor skills [12].

Practical life activities are intended to teach and improve motor skills, muscle tone, and coordination, giving children a sense of independence and the ability to complete tasks without adult assistance [13]. Many of the Montessori practical life activities require using the thumb, index finger, and middle finger, for example, to pick up small objects such as little knobs or small pitchers or to use tongs to transfer shells [14]. Practical life exercises encourage children imitate adult activities such as pouring and preparing food, but with real glasses and utensils available to children [15]. Activities in the practical life area can be divided into four categories, namely: (a) *preliminary applications*; (b) *exercises for the care of self*; (c) *exercises for the care of the environment*; dan (d) *exercises for the development of social skills, grace and courtesy* [16].

In this approach, children will learn to carry out activities that are often carried out in daily activities and this is very easy for children to do to prepare for life in the future. The application of practical life skills in classroom learning based on the results of a study explains that it can improve the fine motor skills of early childhood children [17]. Through practical life activities, teachers can also help build eye-hand coordination, which is a prerequisite for children's motoric development [18].

Based on the results of a needs analysis carried out by conducting a survey of 20 ECE teachers, it was stated that 95% of ECE teachers had implemented fine motor stimulation with an uncertain frequency. Fine motor development carried out by teachers at school includes crumpling paper, rolling, sticking, cutting, drawing and forming with playdough and has not yet been linked to daily living skills. One of the obstacles experienced by teachers is the lack of a guidebook that specifically contains children's fine motor skills or activities. This makes it difficult for teachers to find references for

practical life skill activities that are suitable for children's fine motor development. Study also showed that there is no guidebook based on practical life skills to develop children's fine motor skills [19].

Based on these problems, the aim of this research is to develop an ebook based on practical life skills to develop fine motor skills in early childhood. The ebook option is used as an innovative form of teacher's guidebook so that it is easy and does not require costs to access other than the internet. It is hoped that this ebook can be a solution to provide a reference for stimulating children's fine motor skills in the classroom.

2 Methodology

The type of research used in this research is Research and Development. The aim of development research is to produce a product through a testing or verification process so as to produce a valid, practical and effective product. The model chosen was Borg and Gall with five development steps due to time constraints. These steps are:

1. Initial information collection was carried out by distributing a needs analysis questionnaire regarding early childhood fine motor stimulation guidelines via Google form which was distributed to 20 early childhood education teachers.
2. Planning, namely the researcher makes a product development design plan related to the objectives and content of the book material
3. Developing the initial product format, researchers began to develop the initial product, namely by creating material arrangements, documentation sessions, writing activity steps and assessment rubrics. Ebook created using the Canva application
4. Initial trial by validating the product first with media experts, material experts and user testing involving 5 teachers from 5 early childhood education institutions
5. Product Revision, data obtained in stage 4 is used to make improvements to the guide book ebook product created.

The data collection instrument used when carrying out the needs analysis was an open questionnaire containing indicators regarding the need for a guidebook for fine motor stimulation for early childhood, and validation sheets from material experts, media and users. Wholeness analysis data analysis uses descriptive qualitative data analysis with the Miles and Hubberman technique, namely data collection, data reduction, data display and conclusions. Analysis of data from instrument validation results was carried out quantitatively so that scores were obtained in the valid and appropriate categories.

3 Result and Discussion

Before carrying out the product development process, the researcher first carried out a needs analysis test to collect initial data regarding the need for a fine motor guidebook for early childhood children. Data collection used an open questionnaire via Google Form which was distributed to 20 ECE teachers. Indicators listed include the frequency of teachers implementing fine motor stimulation learning, the urgency of implementing fine motor stimulation, obstacles when planning and implementing fine motor stimulation, types of fine motor stimulation, and the need for a fine motor stimulation guidebook.

Based on the results of data analysis, it was found that 95% of teachers had applied fine motor stimulation every day, and 5% of teachers had applied fine motor stimulation on an erratic schedule. All ECE teachers understand the importance of stimulating fine motor skills in children, the following is the data obtained:

Table 1. Teachers' response about the urgency of fine motor stimulation in early childhood education class

Indicator	Teacher response	Percentage
The urgency of fine motor stimulation	Children's independence	5 %
	readiness for the next level of education	20%
	writing readiness	25%
	stimulates hand-eye coordination and concentration in daily activities	45%
	influence on other aspects of development	5%

Based on Table 1 above, it can be concluded that teachers understand the urgency of implementing fine motor stimulation by providing relevant reasons and the most common is to stimulate hand-eye coordination and concentration in daily activities at 45%. In accordance with the data from the needs analysis, the teacher explained that one of the purposes of fine motor stimulation is to train eye and hand coordination to carry out daily activities. Therefore, a Practical life skills based guidebook which contains training on daily activities is in line with this. Practical life activities are intended to teach and improve motor skills, muscles, and coordination, giving children a sense of independence and the ability to complete tasks without adult assistance [13].

Table 2. Teachers' obstacles when implementing fine motor stimulation

Indicator	Teacher obstacle	Percentage
Obstacles when implementing fine motor stimulation	Finding references	45%
	Finding media	25%
	Finding learning materials	15%
	Teacher human resources	10%
	Children's different abilities	5%

Then as many as 80% of teachers experienced problems when planning fine motor stimulation activities. These obstacles can be seen in Table 2. Based on Table 2 above,

it can be concluded that at most 45% of teachers experience problems in finding references related to fine motor activities of early childhood. Fine motor activities that have been carried out by teachers based on the data collected vary greatly from squeezing, cutting, rolling, playing with plasticine, drawing, coloring, writing, folding, collage, finger painting, sticking, tearing and gluing. Based on the types of activities that have been mentioned, none of them stimulate daily living activities.

Furthermore, the majority of respondents stated that there was no specific guidebook containing activities to stimulate children's fine motor skills. This is supported by the fact that all teachers expressed their need for a guidebook for children's fine motor stimulation that can be used as a reference, making it easier for teachers to choose the right activities according to the child's development stages. Guidebooks for teachers is very important to help make it easier for teachers to carry out the learning process in the classroom. This is in accordance with studies which explains that guidebooks are important for achieving learning objectives [20]. It is hoped that this guidebook can help teachers provide references that suit their needs regarding children's fine motor stimulation.

3.1 Research Planning,

This product, in the form of a guidebook, is planned to contain an introductory section explaining the importance of practical life skills-based fine motor stimulation and the purpose of making the book, materials and examples of assessment rubrics.

3.2 Early Product Development

Products are made based on a practical life skills approach containing 3 themes, namely:

1. Ready to go to school activities, containing guidelines for practicing putting on clothes, fastening shirt buttons, wearing skirts, putting on trousers, zipping up, putting on socks, putting on shoes, and tidying up bags and their contents.
2. Toilet training activities, containing guidelines for training to open trousers or skirts, lower underwear, put on underwear, put trousers or skirts back on, squeeze soap, rub enough soap, open and close the faucet, and wash hands properly.
3. The activity of cleaning up cutlery, containing guidelines for pouring water into a glass, eating using a spoon (spoon), picking up food scraps that have fallen, wiping a dirty Table, putting cutlery in the wash bin, and throwing leftover food in the trash



Fig 1. Book cover



Fig 2. Examples of material containing pictures and explanations of activity steps



Fig 3. Example of ebook display on the heyzine.com application

3.3 Expert Validation

The guidebook product goes through a validation stage by 3 experts, namely material experts, media experts and users. The expert users are 5 early childhood teachers from 5 institutions in Jambi City. This validity test is to determine the suitability of the guidebook product. The following is the data generated from the product validation test results:

Table 3. Validation expert result

Validation	Score	Result
Material	3.36	Decent
Media	3.7	Decent
user	3.2	Decent
Summary	3.43	Decent

Based on Table 3 in the above, the data obtained is that the score for the validity test is 3.36 or in the feasible category, for the material test it is 3.7 or in the appropriate category and the user test from 5 teachers is 3.2, namely in the appropriate category. In conclusion, the average score obtained from the test results of 3 experts is that this fine motor activity guidebook product is suitable for use.

Product Revision

As a result of the material, media and user validation testing process, suggestions for improvement were obtained, namely that the background of the book should be brighter and add components related to early childhood, improvements to the writing of typos, the size and type of letters used to make them clearer, the order of the images. numbers should be given, and the writing of examples of assessment rubrics should be made clearer.

Based on the suggestions that have been obtained from the validator, the next step is for the author to carry out revisions related to the guidebook product. It is hoped that this guidebook can help teachers provide references that suit their needs regarding children's fine motor stimulation. It is thought that through practical exercises, teachers can help children improve their fine motor skills [21]. The following is an example of the results of improvements based on suggestions from validators :



Fig 4. Results of revisions to product manuals

4 Conclusion

This guidebook for fine motor activities based on practical life skills is very important to help make it easier for teachers to get references for fine motor activities that are directed and systematic according to the needs of developmental tasks. It is hoped that further research can develop a guidebook for fine motor activity for early childhood with a focus on other material that is useful for providing life skills to children.

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