

Optimization of Stimulation of Children's Growth and Development Using Educational Game Tools in Widya Karya Kindergarten: Community Service

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ABSTRACT

The growth and development of early childhood is an asset for future generations. The better the growth and development of children, the better the future generation of the nation will be. The purpose of this service is to optimize the stimulation of children's growth and development in kindergarten schools. The service method is divided into three stages, namely the planning, implementation, and evaluation stages. The target of this service is early childhood in kindergarten totaling 45 children. The activity lasts for a full month and the result is that optimal stimulation can increase children's growth and development where in particular development as measured using the Denver development screening test found that most children grow according to their age.

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INTRODUCTION

The growth and development of children is an important aspect that needs to be considered so that children can achieve the next life well and the next generation can become the children that Nusa and the Nation expect. One way to do early detection of child growth and development is by taking anthropometric measurements including body weight, height, head circumference, chest circumference and others (Era Revika, Yuni Fitriana, 2019). As many as 10% of Indonesia's population is a toddler, this is important to note so that the quality of the nation's children in the future will be even better.

Early childhood development is a foundation in building intelligence and forming the personality and character of children. Stimulation from an early age is highly desirable starting from pregnancy, motor stimulation, sensory stimulation so that they can learn and develop their abilities from the experiences they have received (Abeng et al., 2021)

Childhood is an important period in achieving a process of development of a human life. There is a golden period where children aged 2-5 years experience a developmental spike that is different from previous years. The intelligence of a child reaches 50% at the age of 4 years and 80% at the age of 8 years (Directorate of Early Childhood Education, 2010). The stages of development of each child are different and this is an initial foundation to go to the next stage.

Children at an early age must get the right stimulation to stimulate children's development so that they can explore and get information on all things so that development increases. One of the important components for designing learning media and carrying out stimulation using educational game tools (APE) (Henny et al., 2020). These educational play tools make a huge contribution to information processing and learning experiences for early childhood.

This tool not only helps children to develop optimally but also helps children's abilities and fulfills children's physical needs. Learning to play with educational game tools is very meaningful for early childhood where APE contains various aspects including cognitive, social, emotional and physical (Astuti et al., 2021). Measuring growth is also important by involving body size, namely through anthropometric examination it is very necessary so that we can find out the nutritional status of children (Fatsiwi Nunik Andari, 2022)

Stimulating child development using APE is one of the best things to do to stimulate the growth and development of children, especially at an early age. So that teachers at school should also make various types of educational games so that young children get good experiences and understand that the materials around them can be useful things for them. This is what lies behind us to do community service at Widya Karya Kindergarten where this service aims to optimize children's growth and development through educational game tools.

METHOD

The method of implementing community service uses several stages in the service process. The stages of this dedication process are:

a. Preparation phase

The preparatory stage starts from the readiness of the service team by dividing the tasks. The service team divided themselves starting from approaching the Widya Karya Kindergarten principal, then approaching the teacher/homeroom teacher. Then the service team also approached the puskesmas so that they could assist in the process of borrowing educational game tools to be used during the service process. Then some of the team also started preparing educational game materials that can be easily searched to optimize early childhood growth and development.

b. Implementation Stage

In the process of implementing the stages of the service team also dividing themselves, there are those who do counseling, there are those who do counseling or help children directly with a maximum of 1 person 2 students to be able to maximize the process of stimulating growth and development in children. There are also those who take anthropometric measurements including height, weight, head circumference. Then students are assessed for their growth and development using the Denver development screening test as well as to ensure that their growth and development is optimal and appropriate for their age.

c. Evaluation Stage

At the evaluation stage the results of the stimulation that has been carried out are then assessed and informed to the teacher and then the students' parents so that they can maximize their motor, sensory, personal social and language development better. Results that have doubts and rejection in the future can be helped stimulated by further educational games adapted to the appropriate age line and developmental stages.

This community service activity was carried out in January-February 2023 at Widya Karya Kindergarten by targeting 45 children in the small zero and big zero classes.

RESULTS

Community service carried out related to optimizing the stimulation of growth and development in early childhood has a major contribution related to increasing the understanding of teachers and parents about the importance of stimulating children. This activity lasted for 1 month starting from several stages. The activities are as documented below:



Figure 1. Stages of Introducing the Service Team with Goals

This activity began with introducing each other, then greeting each other and introducing themselves to each other. Then start with the approach and introduce educational games.



Figure 2. Stages of Educational Games

The second picture describes the service team taking a personal approach to students through educational games. They then assessed their growth and development results using the DDST and adjusted for the age of the child.



Figure 3. Submission of Evaluation Results

The third picture shows students starting to be invited to play roles and do what they like, singing, dancing and others while the service team explains the measurement results obtained through notes and makes corrections or urgent matters that must be known or resolved by parents and class teachers at Kindergarten Widya Karya.

Playing is the activity that children like the most, playing is also a fun way to get the most appropriate way/technique to increase knowledge. Various kinds of games such as swinging, running, climbing stairs, pretending to make children's imagination increase. Playing is closely related to child growth. Where play activities will directly affect the improvement of six aspects of development including self-awareness, emotional, social, communication, cognition and motor skills (Nesi et al., 2022). Each stage of growth has a different type of game and every time the child gets older, the games and their types are increasingly stratified. The stimulation carried out is expected to help children improve their gross and fine motor skills, personal social and language.

Educational game tools are game tools that are still not widely known by parents and teachers at school. Whereas educational game tools require simple and inexpensive materials and tools, for example manila paper, HVS, scissors, glue, origami, flannel boards etc. (Henny et al., 2020). The role of parents is important where parents and class teachers are expected to be able to help and contribute to improving children's abilities to optimize children's growth and development (Era Revika, Yuni Fitriana, 2019). Apart from parents, there are other factors that can support the optimization of growth and development, namely nutrition, stimulation or stimulation (Andrianie et al., 2017). So that with good stimulation, development will automatically increase rapidly.

Early childhood has its own uniqueness where the child's initiative with the highest score is when the child dares to express when he doesn't like something. Children's initiative abilities must be expressed both feeling sad, happy, annoyed, hungry and others (Alini et al., 2020). This courage is also obtained from the stimulation of good growth and development in children. With the behavior of a child who is afraid, the child will automatically have difficulty mentally expressing something he wants.

There are many stimulation techniques that are carried out by playing English games (Adimayanti & Siyamti, 2020), some are using motor stimulation (Astuti et al., 2021). But all have one goal, which is to improve the ability of children to grow and develop for the health of the younger generation in the future.

CONCLUSION

Optimizing children's growth and development through educational games is effective where children are very enthusiastic to take part in this service and stimulation activity as well as taking anthropometric measurements (growth) and developmental measurements (DDST) the result is that most of them have normal growth and development and not a few children have development advance but there are also those who have denial development

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