Teacher Competence in Developing Motor Skills of Elementary School Students

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Abstract - One of the development aspects that must be developed is physical or motor development. Learning while playing can be used as a way to apply kinesthetic-based motor skills learning by actively involving physical activities or using parts of the body in a happy and fun atmosphere. This research aimed to determine the competence of physical education teachers in developing motor skills of elementary school students and find the effort to improve them. The research subjects were three physical education teachers in the Elementary School, namely: Kentungan Elementary School, Deresan Elementary School and Condong Catur Elementary School, in Sleman Regency, Yogyakarta. The data were collected using questionnaires. The results showed that (1) the competence of the physical education teachers in the elementary schools have not developed children's motor skills properly, (2) the physical education teachers experienced problems in the teaching and learning process, (3) the concept of providing motor stimulation has not been fully understood or practised by the children according to their development. This research recommends that the interesting and fun kinesthetic-based learning model is the basic movement in the series of natural movements that can be contested (circuits) and can stimulate motor skills of elementary school students.

Keywords - teacher, elementary school, development, motoric, skill

I. INTRODUCTION

Today's rapid development and technological advances play a role as a determinant of human life. Computers and the internet provide new pleasures that take up a lot of children's time. The presence of digital television and online games is heavily promoted in Indonesia, which promises high-quality entertainment and can easily attract the children's sympathy. This proves that technology can take the children's time to stay in front of gadgets or monitors every day, which has an impact on low movement activity. One of the most ideal media to implement active activities and promote children to adopt a culture of active living in school is physical education. The opportunity for children to engage in healthy physical activities in school time is a crucial problem [1]. Through physical education, children will get movement activities that have goals.

Physical activities carried out by students basically are a part of strengthening to have a whole kinesthetic intelligence [2]. Educational and learning processes in children should be done with the aim of providing meaningful concepts for children through real experience. The most appropriate learning process for children aged 5-6 years is through concrete experience and motor activities [3]. The age of elementary school children is considered the optimal time to develop motor skills [4]. The development of motor competencies is essential in promoting active lifestyles in childhood and adolescence [5]. Motor skills are the important skills to be developed if the children want to be physically active in childhood and adolescence. Even though maturation affects the emergence of motor skills, children need instruction and practice if they want to develop motor competence [6][7]. The results showed that the impact of implementing physical education in schools on physical fitness was only 15% and the fitness level of the students was in a low category [8].

In Indonesia, the government plans to implement the 2013 curriculum in every school at both the primary and secondary levels simultaneously in 2019 [9]. The 2013 curriculum requires children's readiness in the learning process. The learning principle in the 2013 Curriculum requires the independence of children to be actively involved, find out and learn from various learning sources in order to formulate problems and find alternative solutions to problems. The benefit of motor skills in education, especially in academic readiness for children, has been scientifically proven. Children who have fulfilled their needs in gross motor skills can develop their motor perception and academic readiness, increase their overall behaviours, and help children who experience learning disabilities to achieve their full potential [10]. Every child develops basic motor skills at his own pace. The educational program concentrating on motor development focuses on the needs of each child separately [11]. The adequacy level of motor skills in childhood will significantly affect the physical activities in adolescence [12][13].

Playing is an essential activity that can influence cognitive, physical, emotional, and social development and provide a primary place for social participation [14]. Playing activities are the best way to stimulate children to learn to express feelings, thoughts and views on art [15]. Children's world is the world of playing, so learning by playing is a fun way and makes children unsaturated. Besides, learning while playing can be used as a way to apply kinesthetic-based learning by actively involving physical activities or using parts of the body in joyful and fun atmosphere performed in groups, in pairs, or individually.

The use of scientific and systematic methods in the game has a positive effect on the mastery of movements. Improving skills and motor exercise is needed for motor and mental development for preschoolers [16]. Increased movement and self-perception skills will provide positive
support for children to be involved in physical activities, games and sports [17]. The development of motor skills programs in children should be carried out during the critical period between 3-6 years of age [18]. In children aged 5-6 years, all child kinesthetic movements can be carried out effectively and efficiently. In order for gross motor skills and skills to develop, children can be given kinesthetic stimulation such as running zigzag and jumping with both feet in various directions [19]. Good and right body position and basic movements such as sitting, standing, walking, running and other movements in sports cannot be achieved by children if the right gross motor development program is not implemented; although they have characteristics as energetic and dynamic children [20].

Field observation results. First, the teaching method of the physical education teachers in elementary schools was still based on certain sports that are deemed inappropriate and require students to have high skills to play them. Second, the development of gross motor skills of children has not been developed in a way that matches their characteristics. Third, alternative learning activities to stimulate the gross motor skills of children are less varied so they tend not to complete learning.

Based on the description of the above problems, we need a kinesthetic-based motor skills learning model in the form of circuit games to develop children's motor skills. The learning model developed is in accordance with Basic Competencies (KD) in the 2013 Curriculum for physical education, sports and healthy subjects for elementary school children aged 6-9 years. The development of this learning model is expected to be learning that is good, effective, and fun and make students actively move and be enthusiastic in the motor skills learning process so that they can reach the objective of physical education learning that is to develop motor skills in elementary school students.

II. RESEARCH METHOD

A. Type of Research

This research used a quantitative descriptive method which is defined as a form of research based on empirical facts that occur in the field.

B. Time and Place of Research

The research was conducted from October to November 2018. The research was conducted at Deresan Elementary School, Kentungan Elementary School and Condong Catur Elementary School, in Sleman Regency, Yogyakarta.

C. Research Subject

The research subjects were three physical education teachers of elementary schools in Sleman, Yogyakarta. The selected samples were the physical education teachers of elementary schools because the learning material was in accordance with Basic Competencies (KD) in the 2013 Curriculum for physical education, sports and health subjects for elementary school children aged 6-9 years that is practicing locomotor, non-locomotor and manipulative basic movements in various forms of simple or traditional games.

D. Research Procedure

This research used a quantitative descriptive design. The researcher observed (1) the competence of physical education teachers of elementary schools in developing children's motor skills and; (2) to find the efforts of physical education teachers of elementary school to develop the student motor skills. Through the motor learning model in the form of circuit games consisting of the basic aspects of speed, agility, balance, limb power and eye and hand coordination, it is expected to stimulate students' motor skills.

E. Data Collection Techniques

The data were collected using the survey method, but the researcher did not conduct a direct test of the students' motor skills. The instrument used was a questionnaire. The questionnaire consists of 7 items of questions addressed to the teachers to find out and explore complete information about the motor learning process they have given. Furthermore, from the results of the teacher questionnaire, an analysis of the competencies and constraints of teachers was carried out in the teaching-learning process.

F. Measuring Instrument

This research was measured based on the indicators of items about motor learning which aimed to find out how far the competence of physical education teachers is in developing motor skills of elementary school students.

III. RESULTS AND DISCUSSION

A. Result

The results showed that there were the constraints of physical education teachers in providing motor stimulation. The three elementary school physical education teachers stated that the concept of providing motor stimulation had not been fully understood or practiced by children according to their development. The teachers still faced problems in the teaching-learning process.

From the results of this research, it is expected that the kinesthetic-based learning model can be used as the motor skills learning model to develop the motor skills of elementary school students through games and competitions (circuits).

B. Discussion

The product development of this learning model began with analyzing needs based on the observation and interviews with physical education teachers in elementary schools and literature review. After determining the product to be developed in the form of developing the motor skills learning model with circuit games, the next step was to make the product to be developed. After going through the design process, the initial product development model of motor skills learning in the form of circuit games.

Efforts to develop the potential of motor skills and the development of elementary school children as a whole require training or in the form of a game approach to improve gross motor skills with the treatment appropriate to the characteristics and abilities of elementary school children. The development of content and objectives of the motor skills learning model in the form of circuit games were
This motor skills learning model contains four stages, namely: (1) pre-activities, (2) warm-up activities, (3) main activities and (4) post-activities. Based on the results of the analysis of the needs of elementary school physical education teachers related to the product developed, the motor skills learning model in the form of circuit games is very good for the development of motor skills of elementary school students aged 6-9 years.

### IV. CONCLUSION

The development of the kinesthetic-based motor skills learning model can be concluded as follows: (1) From the product produced, this research recommends that the interesting and fun kinesthetic-based learning model is the basic movement series of natural movements that can be contested (circuit) and can stimulate the motor skills of elementary school students, (2) Kinesthetic-based learning model which contains four stages, namely pre-activities, warm-up activities, core activities and post-activities can be accepted as the learning model to develop the motor skills of elementary school students aged 6-9 years.

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### REFERENCES

[1] Kerry L, Melver, William H, Brown et al, “Development and testing of the observation system for recording physical activity in children: elementary school,” Research Quarterly for Exercise and Sport, vol. 87(1), pp. 101-109, DOI:10.1080/02701367.2015.1125994, 2016.

[2] Muhyi, M and Suharti, “Learning through movement senam bugar cerdas ceria berkarakter (Senam BCCB),” Yogyakarta, 2016.

[3] Eliason. C. F, and Jenkins, L. T, “A practical guide to early childhood curriculum,” Colombus, Ohio: Merril Publishing Company, 2008.

[4] Cecilia Chan, Amy Ha, and Johani, Y.-Y. Ng, “Improving fundamental movement skills in Hong Kong students through an assessment for learning intervention that emphasizes fun, mastery and support,” Department of Sport Science and Physical Education, Chinese University of Hong Kong, DOI 10.1186/s40064-016-2517-6, vol. 5(724), 2016.

[5] Cattuzzo MT, Henrique RS et al, "Motor competence and health-related physical fitness in youth: a systematic review, Journal of Science and Medicine in Sport," http://dx.doi.org/10.1016/j.jsams, 12.004, 2014.

[6] Depdiknas. Academnic Manuscript: “Pendidikan Jasmani, olahraga dan keolahragaan Badan Penelitian dan Pengembangan (Physical education, sports and health, Research and Development Agency),” 2007.

[7] Robinson. LE, Stodden. DF, Barnett, LM et al, “Motor competence and its effect on positive developmental trajectories of health,” Sports Med, vol. 45 (9), 2015.

[8] Goodway. JD, and Robinson, LE, “Developmental trajectories in early sport specialization: a case for early sampling from a physical growth and motor development perspective,” Kinesio Rev, vol. 21 (5), pp. 267-278, 2015.

[9] The Minister of Education and Culture Regulation Number 160 of 2014 about the Implementation of the 2006 Curriculum and the 2013 Curriculum.

[10] Johnstone. J.A, and Ramon. M, "Perceptual motor activities for children: An evidence-based guide to building physical and cognitive skills 1st edition," Champaign, IL: Human Kinetics, 2011.

[11] Gallahue. D, “Developmental physical education for today’s children,” Dubuque, IA: Brown & Benchmark, 1996.

[12] Lopes. VP, Rodrigues. LP, and Maia. JAR et al, “Motor coordination as predictor of physical activity in childhood,” Scan J Med Sci Sport, vol. 21(5), pp. 663-669, 2011.

[13] Barnett. LM, van Beurden E, Morgal. PJ et al, “Childhood motor skill proficiency as a predictor of adolescent physical activity,” J Adolesc Health, vol. 44(3), pp. 252-259, 2009.

[14] Behr. A. K, Rodger, S., and Mickan, S, “A comparison of the foundational skills of preschool children with and without developmental coordination disorder,” American Occupational Therapy Foundation, 33, pp. 198-208, 2013.

[15] Hayati N, Seriati, N.N, and Lusi N, “Kegiatan bermain berbasis seni prajurit bagi anak usia dini untuk mempromosikan kecintaan pada lingkungan (Art craft-based play activities for early childhood to promote love for the environment),” Jurnal Kependidikan, vol. 42(2), pp. 152-161, 2012.

[16] Lupu. E, “Study regarding the impact of motion games in the intellectual motoric development of preschool children,” Journal Procedia Social and Behavioral Sciences, 30:1209-14, 2011.

[17] Baruti. H, and Masoume. P. T, “The effect of social skills training on socialization skills in children with down syndrome,” Iranian Rehabilitation Journal, vol. 10(15), 2012.

[18] Vameghi. R, Shams. A, and Dehkordi, P.S, “The effect of age, sex and obesity on fundamental motor skills among 4 to 6 years-old children,” Pak J Medicine Science, vol. 2(29), pp. 586-589, 2013.

[19] Rahyubi. Heri, “Teori-teori belajar dan aplikasi pembelajaran motorik (Learning theory and motor learning application),” West Java: Penerbit Nusa Media, 2016.

[20] Breslin. G, Marie. M, Brian, D, and Martin, D, “The effect of teachers trained in a fundamental movement skill programme on children’s self-perception and motor competence,” Journal of European Physical Education Review, vol. 18(1), pp. 114-126, 2012.