LEARNING MODEL OF PHYSICAL EDUCATION USING MULTIPLE INTELEGENSCIES APPROACHES AND INFLUENCE ON CREATIVITY DEVELOPMENT

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ABSTRACT

This study aims to develop a model of teaching physical education using multiple intelligences approach and its influence on the development of creativity. Using research methods development research and experimental comparison group design. The population is kindergarten in town, Blitar, Malang, Batu, Malang regency, consisting of 36 preschool, kindergarten as many as 12 samples taken in 3 cities, namely Malang, Blitar stones and as many as 240 people, a path analysis using ANOVA (one way ANOVA) , the F-test at significance level of $\alpha = 0.05$ level. Results, the model of physical education with a model of multiple intelligences approach to the Intelligent post Games, and its influence on the creativity development with Fhit. = 50.917> F = 3,871.

Keyword: development of creativity, multiple intelligences, physical education

INTRODUCTION

Physical Education (PE) cannot be separated from the National Education System, and it is the integral part intergrated with the national Education System. The success of the Physical Education at schools will affect to the success of the National Education System. The physical education has an important role to form the qualified human being physically, mentally, socially and morally.

Successful in life, in the reality it is seen that a person with high IQ does not mean that he is successful and does not mean that he is happy. It shows that IQ is not a warranty for someone's success, although the IQ has an important role in someone's life, especially in the matter of knowledge development (cognitive). According to Gardner (2003) there are at least eight intelligence domains possessed by human being that can be developed since the early time i.e: (1) music, (2) body kynesthetic, (3) mathematics logic, (4) language, (5) ***(spaces),*** (6) interpersonal, (7) intrapersonal and (8) naturalistic. Entirely the eight intelligences are called *Multiple Intellengecies* (MI). Every one has these eight intelligences and every day he or she uses with the different combination and portion (Amstrong, 2003). The multiple intelligence theory of Gardner gives us the point of view of the complete student ***potentio***n, therefore their multiple abilities that are neglected will be apreciated and developed as well.

Developing the multiple intelligence can be done since the early time, one of the ways is through the education institution for the early-age children. The Sisdiknas regulation No. 20, 2003 verses 28 about the education for the early-age children states that PAUD is held through the formal education namely TK (kinder garten) and RA (Rudotul Atfal/Islam kindergarten),informal education i.e: Play Group and TPA (Al Qur an Education school) and held through informal education i.e: family education. This research will discuss about the

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physical education held in the level of the formal education namely Kinder garten or RA (Islam kindergatren).

Besides that, the early-age children are the important period in their ability development. In this case, just like what is stated by Erikson that the age of 3-5 years is the golden period that really determines the children to learn the sensitive period to absorb all information around them and less of the learning stimulation during this age is a disadvantage (Erikson in the Ayahbunda magazine, 2000). That opinion is strengthened by the research result done by some child psychologists. It is explained that the intellectual development of children happens maximally when they are at the early age, more or less 50% of the intelligence variabilities happen when they are at the age of four years old (Diknas, 2002). Those above statements show that at the early-age children, the intelligence is determined, therfore the stimulation given to the early-age children will determine the quality of the children in the future in their life.

Physical Education is given to the students for every level of education, starting from the basic level until the university ones. Based on the curriculum used at schools, the Physical education in kindergarten is called as the Physical development namely the subject /lesson given at the early age is to develop the basic ability through physical activities. Although they are different in words, theoritically, they have the same essence both between the physical education and the physical development i.e: both of them are the parts of the education process directed to develop and increase the ability of the human being entirely (physically, mentally, intellectually, emotionally and spiritually) through the media of the physical activities.

The physical education in PAUD (the early-age education) has a potention to develop the intelligence domain of children because the physical education is an education done through the physical activities, by using various activities in the forms of sport activities. Edward (1973) explained that the definition of sport begins from the wide definition including *play* (bermain), *games* (permainan) and sport (olah raga). The teaching characteristic in the early age is 'playing while learning' or 'learning while playing' (Diknas, 2004), therefore it is really right if the physical education is used as media to develop intelligence of the early-age children.

METHODOLOGY

This study aims to develop a model of teaching physical education using multiple intelligences approach and its influence on the development of society and the environment. Using research methods (1) research and development (2) experimental studies using the static group comparison design. The population is kindergarten in town, Blitar, Malang, Batu, Malang regency, consisting of 36 preschool, kindergarten as many as 12 samples taken in 3 cities, namely Malang, Blitar stones and as many as 240 people, a path analysis using ANOVA (one way ANOVA) , the F-test at significance level of $\alpha = 0.05$ level. Results, the model of physical education with a model of multiple intelligences approach to the Intelligent post Games, and its influence on social development and the environment with Fhit. = 50.917> F = 3,871.

FINDINGS

The influence of the learning model based on the multiple intelligence towards the learning result of creativity development.

The influence between the learning model by using the multiple intelligence approach and the learning model existed at scholl towards the leaning result for the area of the early-age cild creativity development is analysed by using the ANOVA analyses, from the test we found data as follows:

Tabel 1. The approach influence of the multiple intelligence learning method towards the learning result of the creativity development

ANOVA

Tes

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	66.535	1	66.535	50.917	.000
Within Groups	410.310	314	1.307		
Total	476.845	315			

The result of test F with significance α = 0.000 is 50.917. Table F (0.05,1,134) = 3.871. Since count or 50.917 > 3.871, the working hyphotese is accepted (H1 is accepted) and the zero hyphoteses is rejected (Ho is rejected), therefore we can say that there is influence between the learning model by using the multiple intelligence with the learning model existed at school towards the learning result in the area of the students‘ creativity development.

DISCUSSION

The application of the learning model used by teachers for learning of the early-age children at school basically is not too different from the learning models by using the multiple intelligence. It is just like something explained by Tienjte & Iskandar (2004) which stated that the learning for the early-age children has five essential charateristic of playing in relation with the children’s development , namely : a. playing is doing an activity because there is motivation from the children, this activity is done in order that we can entertain ourselves, b. playing is the free choices of the children, they can choose to play or not to play, c. playing must be fun, children must feel fun in getting the experience to do the activity, d. playing is a non-linear activity, this activity involves an element which is from one step to the next step, e. in playing, children are involved actively, this activity involves the children physically and phsychologically.

Hawadi (2001) said the same thing, he explained that the learning for children aged 4-7 years old (early ages) emphasizes on the game forms that have functions to make the children have oportunities to explore, find something, express feeling, have creativity and learn with fun ways. To fulfill those needs, teachers as one of the learning sources need guiding about the various sport games in order to develop the early-age children’s capability holistically through the games activities.

It also happens to the approach by using the multiple intelligence on the physical and health learning, it is not different from what we mean of the two opinions above, basically the multiple intelligence approach wants to explore more details about each component of those learning purposes, namely interpersonal intelligence, music, laguages, mathematics logic, spacial, naturatistic, intra personal and kinesthetic. In details those purposes are, a. developing the competence of the rough motoric coordination, b. putting in the sportivity and dicipline values, c. developing the physical fitness, d. introducing the healthy life early, e. introducing beautiful movement through the music rhythm (Diknas, 2004).

However, if we see from the component factors that are going to be developed seriously, we can see that there are differences between the model of learning approach done by the teachers at

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school and the learning model with the multiple intelligence, especially on the development factors : a. the area of language competence, b. the sense of the social and environmental health, c. creativity, d. the development of the physic and health, in which the learning model with the multiple intelligence approach is better if we compare it with the model of learning approcah done by the teachers at schools.

It is caused that in the model approach of multiple intelligence on each exercise model is emphasized very much on developing those factors(elements). On the interpersonal intelligence we put the evaluation in the factor (element) of social and environment health development to be applied in each game models, with the improved indicator namely : cooperation between two (2) people forms a bridge (traffic games). They are the cooperation to finish pictures and the children's ability to give support to their friends who are playing the games (cheerful relay games and smart circuit). It is suitable with the Gardner theory (2003) which explains that the intelligence or competence to communicate with other people (socializing). According to Soenaryo (2004) the way of learning to optimize the interpersonal intelligence is one of them as mediator/developing the ability to work together(to cooperate). The similar condition is also explained by Amstrong (2003) that the best way of learning for talanted children in this category has the realtionship and the cooperation.

In the development of music competence, there is only one game that applies this intelligence ; however, there is still possibility that all games can put this intelligence, the indicator of this music competence used in the games are : the children's competence to sing songs with the traffic theme while clapping their hands (traffic games). It is suitable with the Gardner theory (2003) which explains that the music competence is a competence that is based on the awarness on the pitch of the tone, including various surrounding sounds and the sensitivity towards the music rhythm. Children with the musical competence learn through the rhythm and the melody, therefore in their learning process we can use the percussion as the music instrument as a way to help them learn new materials (Amstrong,2003). Therefore, the children's ability to know the music instrument and to know how to play it can be used as one of the indicators from the music competence.

Meanwhile in the spatial competence that is included in the creativity development, it is applied in almost all games, the indicators that are developed are: a. using the pictures with the traffic themes (traffic games), b. drawing an object by connecting the dots provided in the pictures and knowing the movement directions (straight or turn/curves) (the cheerful relay games), c. using the bottles filled with the red and blue-colored water, the plantation and animal pictures and playing with the circuit concepts (smart circuit games). These activities are suitable with Gardner opinion 2003) which explains that the intelligence that is realized in the competence by using the sense of sight and the ability to visualize an object, includes a competence to create mental-imagination/drawing (painting). This opinion is supported by Amstrong (2003) which explains that to stimulate this intelligence, children need to be taught through drawing, metaphor, visual and colors. The opinion is strengthen by Suparno (2004) which explains if we want to stimulate this intelligence, we can do it by giving activities that support the elements of colors, shapes, designs, textures, patterns, pictures or visual symbols that can be seen.

Interpersonal Intelligence. This intelligence is used in almost all games; there are some difficulties to apply the intelligence indicators in the games. However, in this module we try to apply this intelligence in the forms of games, the intelligence indicators that are developed are: a. feeling the touch of their friends' bodies and motivating themselves to obey every game's rule and introducing human's identity as well based on the genders (traffic games), b.

motivating themselves to hand in the flags to their friend in their group (cheerful relay games), c. motivating themselves to finish the game in every post (smart relay games). The activities in those games are suitable with the Gardner opinion (2003) namely the intelligence related to "the inside aspect" of someone (egoism): self reflection, metacognition, and the awareness of the spiritual reality. Suparno (2004) explained that as educators, teachers can help the children to increase intrapersonal intelligence in some training like managing emotion, training concentration, and empathy, knowing themselves. This opinion is supported by Amstrong (2003) which explained that children having this intelligence motivate themselves to do an activity.

For the kinesthetic intelligence, we put the learning evaluation of the early-age children is included in the development of the physical and health elements/factors. In the learning process, physical education is one of many subjects at schools that tries to optimize the children's kinesthetic intelligence, with the kinesthetic intelligence indicator developed are: a. children's competence do movement activities like to stand up, run, walk, bend to form a bridge, crawl, march (traffic games), b. hopping, stepping, jumping, running and walking on the footbridge block (cheerful relay games), c. walking on the footbridge, zig zag running, tiptoeing and crawling (smart circuit games). Gardner (2003) explained that the intelligence is related to the physical movements (the movement of the body or the part of body); including the motor brain nerves that controls the movement of the body and the part of the body. In the application Amstrong (2003) suggested to give children an access to play in the field, hurdle field (a field that is already designed), swimming pool and sport room. Besides that this game is aimed to train the gross motor movement of the children. It is suitable with the opinion of Sugiyanto and Sudjarwo which explained that gross motor skill is a movement in which its application involves the big muscles as the main base of movement (running, walking, throwing, etc). The models of the games developed have already adapted with the early-age children's basic movement needs which are divided into three kinds of movement namely locomotor movement (walking, running, hopping, and jumping), non locomotors (*stretching*, *push-up*, *sit-up* and flickering the body to the frontward) and manipulative (catching, throwing and hitting) (Corbin 1980).

CONCLUSION

Based on the research purposes, we can conclude as follows: ***First***, there are two models that can be developed by using multiple intelligences approach, which models the Intelligent post Games, ***Second*** There are differences in the physical education learning outcomes in creativity development among students who use the learning model of physical education based multiple intelligences (Multiple Intellegencies), by using a learning model used by teachers in schools. The use of the model-based physical education learning multiple intelligences (Multiple Intellegencies) is better than the learning model used by teachers.

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