



Difference of Physical Education Teachers Skills Viewed from Students Creative Thinking Skills

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ABSTRACT

This study aims to determine the teacher's skills in teaching in terms of students' creative thinking skills. Physical education goals which contain the intellectual, mental, social and emotional dimensions and the use of curriculum 13 as the vehicle to achieve that goal. Curriculum 13 to achieve that goal suppresses 4C namely critical, creative, collaborative and communicative. This type of quasi-experimental research uses a comparative causal design. The study population was all eighth grade students in State Middle School 1 Diwek and MTS State 15 Jombang. The sampling technique in this study used random sampling of classes, a sample of 64 students. Data collection of this study uses the sheet of teaching skills and test thinking of students. The data in this study were analyzed using SPSS 20 and used a significance level of 0.05. The skills of physical education teachers can be seen the teacher's picture in conditioning during the learning process. Based on the results obtained by the PJOK teacher data in SMP N Diwek 1, the score was 83.33%. Whereas physical education teachers at MTs N 15 Jombang get a value of 70% and data analysis shows that the probability value is less than 0.05 which is equal to 0,000 so that the null hypothesis can be withdrawn rejected and the research hypothesis accepted. This means that there are differences in physical education teacher skills in SMP N Diwek 1 with physical education teachers in MTs N 15 Jombang in terms of creative thinking of students.

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INTRODUCTION

The purpose of physical education subjects develops four other aspects of intellectual, mental, social and emotional abilities, not just physical. Rink & Hall (2008), revealed that



physical education has a meaningful impact on learning experiences if the learning process contains; (1) the potential to improve students' motor abilities; (2) providing maximum activity or time to train all students correctly; (3) according to the level of students; and (4) has potential integrating educational goals (skills, attitudes, and knowledge). Lynch & Soukup (2016), emphasizes that physical education is a key area of learning, because physical education focuses explicitly on the development of movement and knowledge skills, and self-confidence and health as a result.

The way to learn diverse students in accordance with the development and background of learning with history so that learning methods are needed accordingly so that the objectives of physical education learning can be achieved effectively and efficiently. This is supported by Silverman (2005), stating that students need different time and practice and this is determined by a teacher in designing the right learning process to be able to master higher movements or skills. Clarified again by Silverman & Mercier (2015), explained that physical education teachers have an important role in designing instructional skills for physical development and motor skills of students.

The existence of educators in optimizing existing facilities and can make students learn without feeling forced is the main thing. Students when motor activities will feel happy and happy so that the goals can be achieved without realizing it. In addition to learning to move and learn from the movement itself unconsciously also that can activate brain cells so that it works optimally. The brain itself consists of two parts namely the left hemisphere (left hemisphere) and the right hemisphere (right hemisphere). The left hemisphere is related to the ability to think scientifically, critically, logically and linearly, while the right hemisphere is associated with functions that are non-linear, non-verbal, holistic, humanistic, and even mystical. So that cognitive abilities can develop well in addition to motor skills. Cognitive abilities in curriculum 13 emphasize C4 which is critical, creative, collaborative and communicative. One ability to think creatively stimulates the birth of creativity in the form of ideas and real work is a combination of the two hemispheres of the right and left brain Sherwood.

The importance of education to create creative students can be seen in the Partnership for 21st Century Skills, Education & Competitiveness A Resource And Policy Guide (2008), which shows the need for generations capable of being flexible and adaptive, initiative and independent, social and cultural skills, productive and accountable and spiritually leadership and responsibility for development technology. In addition, based on the Tough Choices or Tough Times National Center on Education and the Economy (Tough Choices or Tough Times National Center on Education and the Economy, 2007), it was revealed that creativity is the main key to success along with the development of a sophisticated era. In the world of work, having a creative level is needed by every worker. In the subject of physical education also takes part in creating or providing stimuli so that the learning process is able to provide high-level thinking stimuli, especially creative thinking.

To create students who have creative provisions for the future, it needs to start from the existing learning process. Krathwohl (2002), states that the highest ability is creative and this is formed by learning various combinations of knowledge dimensions. The

curriculum in educational units is the basis for conditioning the learning process can develop ways of thinking creatively on students, critically solving problems, and communication and collaboration. According to Carroll (2007; Trilling & Fadel, 2009), stated the need for new transformations and standards for students by replacing skills competencies and basic knowledge from the past. Departing from the things above the researcher, aims to determine the effect of motion activity through play. Researchers plan to carry out research with the title "Differences in teaching physical education teachers in terms of students' creative thinking skills".

Understanding of creativity according to Torrance in Munandar (2009) is the process of feeling and observing the existence of problems, making guesses about deficiencies (problems), assessing and testing suspicions, continued to change and test them again, and finally deliver the results. According to Downing in Sani (2015), creativity is a process to produce something new from existing elements by rearranging these elements. So that it can be interpreted as creativity is a process of producing something new, both in the form of ideas, real works, methods or new products used to solve a problem.

Creativity can be divided into several categories (Sani, 2015), namely: 1) Creativity in art is creative related to talents specifically in the arts, such as: photography, music, writing, drama, drawing, painting, engraving and so on. 2) Inventive Creativity (finding) is divergent thinking ability and can be developed through training, especially the practice of solving problems and designing things, 3) Creativity Theater is related to the ability to play a role that can be touching, make joy and influence the emotions of the audience. Creative is constructive creativity is related to the ability to synthesize various components. Synthesis must be done in stages so that constructive creativity must be formed by developing the ability to make flow charts, plans, texts, and so on. 4) Interpersonal creativity is related to the ability of students to network, negotiate, or convince people.

Based on the theory and research that has been developed, the stages of developing students' creativity that can be done is to train students for the following things (Sani, 2015). Bring up feelings of nonconformity, the creative process begins by making the learners sensitive condition to know and feel what is not appropriate or not suitable for his work. Teachers need to train students to look for elements that disrupt balance and invite students to make modifications or eliminate the disturbing parts, a) Gathering elements, elements that are creatively developed are collected without organizing first, b) Element settings by looking at the similarities. Things in the process of gathering elements include: imagination, intuition, experience, knowledge, asking questions, thinking flexibly, thinking fluently and thinking differently, c) Modifying elements, after students have ideas that will be done, d) Looking for synthesis, several elements to be put together in groups. Learners need to try to find elements that can be grouped by searching, struggling, and stretching components, e) Incubation, opportunity to rest to students from efforts to collect elements and look for synthesis, this needs to be done to avoid saturation and increase productivity in trying to see the problem from a new perspective. Without adequate, saturation will hinder the creative process of students. After resting or looking for new situations, new ideas often appear that were not found when trying hard to develop creative ideas, f)

Inspiration (finding something new), the process requires adequate rest after making an effort to combine elements into a creative work. Inspiration may arise when trying, but generally it appears after saturated students think and rest by turning attention to other things, g) Verify, after integrating and modifying elements creatively, students need to test to find out whether their work is acceptable or not. This stage is not a stage of creativity, but needs to be done to test the work.

MATERIALS AND METHODS

This research belongs to the type of comparative research. comparative research is a study that compares one sample group with another sample group based on certain variables or measurements (Maksum, 2012). Research does not provide treatment in comparing and looking for causal relationships of variables. Researchers only look for the causes and test them by tracing back and forth to look for causes, possible relationships, and their meanings. The determination of this sample uses randomly for two schools. This research assumes both class VIII and obtains material for physical education. The study population was all eighth grade students in State Middle School 1 Diwek and MTs State 15 Jombang. The sampling technique in this study uses random sampling of classes.

The variable of this study consisted of dependent variables namely the teaching skills of physical education teachers and students' thinking skills. The population of this study was all eighth grade students of SMP State 1 Diwek and all eighth grade students of MTs 15 Jombang. The research sample was taken by class-based random sampling technique. Based on the sampling technique obtained 64 students. The data collection of this study used observation sheets of physical education teacher teaching skills and thinking tests of students using worksheet tests to see 1) fluency in the use of words in finding certain structural requirements, 2) fluency reorganizing perceptuals from a given word, 3) Fluency in expressions, 4) fluency in giving ideas, 5) flexibility in thinking, 6) ability to develop ideas. The data in this study were analyzed in stages, namely: data description, prerequisite test, and hypothesis testing. The prerequisite test is the data distribution normality test, variance homogeneity test, and difference. The calculation of this study uses SPSS 20 and uses a significance level of 0.05.

RESULTS AND DISCUSSION

Result

The data obtained in this study then count according to the needs of the analysis. This study focuses on differences in teacher skills in teaching physical education in terms of students' creative thinking abilities. Descriptions of the data presented and grouped so that there is a tendency for teacher skills to teach physical education and tests of creative thinking of students. The description of the results of this study can be described below.

Table 1. Data description

No	Skill Indicator	SMP N 1 Diwek	MTs N 15 Jombang
1	Preparing Learning (RPP, self, student data, place, tools)	4	3

No	Skill Indicator	SMP N 1 Diwek	MTs N 15 Jombang
2	Opening Learning (presence, material scope, perception, purpose: KAP)	4	3
3	Managing Time and Learning Arena	4	3
4	Managing Heating and Cooling	4	4
5	Placing Yourself (positioning yourself in the learning arena)	5	4
6	Make a Command	5	3
7	Monitoring Commands	4	4
8	Give Feedback (truth recognition / correction)	4	3
9	Record the progress of student learning	4	3
10	Asking / exploring Recovery of Student Learning Experience	4	4
11	Closing learning	4	4
12	Evaluate yourself	4	4
Total		50	42
Persentase		83,33%	70%

Based on the skills of the physical education teacher, it can be seen the teacher's picture in conditioning during the learning process. PJOK teachers in SMP N Diwek 1 get 83.33%. Whereas physical education teachers at MTs N 15 Jombang get a score of 70%. This value is in accordance with the teaching skills of physical education teachers, including: 1) Preparing Learning (lesson plans, self, student data, place, tools), 2) Opening learning (presence, material scope, apperception, purpose: KAP), 3) Managing Time and Learning Arena, 4) Managing Warming and Cooling, 5) Placing Yourself (positioning yourself in the learning arena), 6) Making Orders, 7) Monitoring Commands 8) Giving Feedback (truth recognition / correction) 9) Recording Progress in Student Learning, 10) Asking / exploring Recovery of Student Learning Experience, 11) Closing learning, 12) Evaluating yourself.

Table 2. Descriptive Statistics
Dependent Variable: Result Test

Name School	Mean	Std. Deviation	N
SMP N DIWEK	87.19	5.31	32
MTs N 15 Jombang	72.69	4.89	32
Total	79.94	8.89	64

Based on the data obtained it can be described that the mean of SMP N Diwek 1 is 87.19 and the MTs group is 72.69. It can be seen from the different meanings that the largest average is 87.19 obtained from the sample in the experimental group. While the MTs group scored 72.69. After the data obtained need to be analyzed to test the hypothesis first, the Kolmogorov-Smirnov test and Levene's test are conducted first. Kolmogorov-Smirnov's test and Leven's Test were conducted to find out whether distributed data follows normal or not data distribution and variants. After this test is done the data are tested comparatively. Below is a test of Normality and Homogeneity.

Table 3. Normality test

One-Sample Kolmogorov-Smirnov Test			Result Test
N			64
Normal Parameters ^{a,b}	Mean		79.9375
	Std. Deviation		8.88708
Most Extreme Differences	Absolute		.124
	Positive		.124
	Negative		-.091
Kolmogorov-Smirnov Z			.994
Asymp. Sig. (2-tailed)			.276

a. Test distribution is Normal.
b. Calculated from data.

Table 4. Homogeneity test
Levene's Test of Equality of Error Variances^a
Dependent Variable: Result Test

F	df1	df2	Sig.
.485	1	62	.489

Based on these results it can be concluded that the data is normally distributed and can continue to be tested further. While for the normality test the data is said to be normally distributed if the significance level is more than 0.05. It can be seen from the table that the value of the Normality test is 0.276. So that it can be stated that the results are normal and can proceed to hypothesis testing. The test table above the data is said to be distributed homogeneously if the significance level is more than 0.05. The homogeneity value of the significance of the results of the homogeneity analysis prerequisite test is 0.489.

Discussion

After conducting the prerequisite test, it is then followed by a hypothesis test. Test this hypothesis to answer the hypothesis that there are no differences from the experimental group. Based on the results of different samples obtained data below.

Table 5. T-Test

	t-test for Equality of Means						
	f	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
					Lower	Upper	
Equal variances assumed	11.3	62	.000	14.5	1.3	11.95	17.05
Equal variances not assumed	11.3	61.5	.000	14.5	1.3	11.95	17.05

In the table above it can be seen that the results of the calculation of data analysis show that the probability value of the learning strategy is less than 0.05, which is equal to 0,000. Thus the null hypothesis is rejected and the research hypothesis is accepted. This means that there are differences in physical education teacher skills in SMP N Diwek 1 with physical education teachers in MTs N 15 Jombang in terms of creative thinking of students.

The teacher's ability to determine the learning model is important in achieving the learning objectives that will be achieved by students. Characteristics of learning models. According to Joyce dan Weil (2016, p.15), it is grouped into 4, namely: 1) processing information; 2) social; 3) personal; 4) behavioral system. So that learning achievement targets will be easily achieved if the learning model is in accordance with the characteristics of students. (Butler & Griffin, 2010) provides learning with a student-centered approach and games will help students construct learning in what is widely known as the TGfU learning model. TGfU is closely related to cognitive teaching, when the model is embodied in a tactical game learning model in teaching PJOK which leads to actual games. Menurut Basuki et al. (2021), the use of games in the learning process has an influence on the ability to think creatively in students.

CONCLUSION

In the table above it can be seen that the results of the calculation of data analysis show that the probability value of the learning strategy is less than 0.05, which is equal to 0,000. Thus the null hypothesis is rejected and the research hypothesis is accepted. This means that there are differences in physical education teacher skills in SMP N Diwek 1 with physical education teachers in MTs N 15 Jombang in terms of creative thinking of students.

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