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The 3rd International Seminar On PE, Sport, And Health 2013

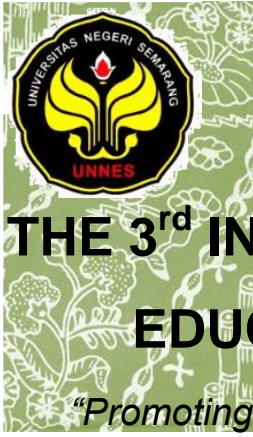
**“Promoting
Investment
in Physical Education
and Sport
Programmes”**

16th November 2013,
Poncowati Hall,
Patrajasa Hotel Semarang



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PROCEEDING



THE 3rd INTERNATIONAL SEMINAR ON PHYSICAL EDUCATION, SPORT AND HEALTH 2013

"Promoting Investment in Physical Education and Sport Programmes"

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PREFACE

Assalamu'alaikum warrahmatullahi wabarakatuh

May we first made our highest praise and thank to Allah swt, for His bless we are able to gather here on the prestigious occasion; the 3rd International Seminar on Physical Education, Sports and Health 2013 with the main theme of "Promoting Investment in Physical Education and Sport Programmes", to share our knowledge and ideas with so much warm and friendship from world wide sports community.

The tendency of the development issues of physical education and sport at the international level was raised in one of the UNESCO conference recently, namely the MINEPS V held in Berlin, Republic of Germany on May 2013. This forum has developed a long and intensive discussion of related issues and policies UNESCO member states in managing the implementation of physical education and sport. The discussions focused on policy issues and the implementation of the three areas with the theme:

- 1 . Access to exercise a fundamental right of all human beings
- 2 . Encourage investment in the program of Physical Education and Sports
- 3 . Maintaining the integrity of sport

Hopefully, the major issues can be understood and can be implemented operationally in the development of physical education and sports in Indonesia through this scientific meeting forum, involving scientists, stakeholders, and observer of sports. Scientific forum in the form of an international seminar held by the Faculty of Sports Science Semarang State University, serves as a platform which allows scholars, professionals, researchers and sport technocrats to share and discuss the latest knowledge and findings with the purpose of transforming a revitalization and rethinking in the effort to encourage investment in the program of Physical Education and Sports as well.

I would like to deliver our highest respect and appreciation to Minister of Youth and Sport of Republic of Indonesia and to the Rector of Semarang State University for their support and appreciation on this seminar, and it is a great pleasure for me to express my deep gratitude to our honourable guests: Prof. Surachai Jewcharoensakul, Ph.D (Dean of Faculty of Education Kasetsart University Thailand), Madame Wu Min, Ph.D (Lecturer in Central China Normal University, Wuhan China), Madame Rebecca Alcuizar, Ph.D (Senior Lecturer in Mindanao State

University-Iligan Institute of Technology, Phillipines), Mr. Rodney Yeo, M.A. (Senior General Manager SportSmart-Skill, Singapore Sport School, Singapore), and Mr Agus Mahendra, M.A. (Senior Lecturer, Indonesia University of Education, Bandung – Indonesia). I really expect that this seminar will be beneficial for all of us and to the development of the Physical Education and Sports.

Allow me to express my gratitude to the participants and audiences from Indonesia and other foreign countries who are enthusiastic in attending this precious seminar. I do hope that all audiences will gain important values and collaborate it into our own fields and make crucial changes in the future. Beside that, I also convey my appreciation to all of organizing committee who has given their outstanding commitment for presenting this International seminar.

Wassalamu'alaikum warrahmatullahi wabarakatuh

Sincerely yours

Prof. Dr. Tandiyo Rahayu, M.Pd

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An Integrated Thematic Physical Education Game Model for Grade I Students

Based on Curriculum 2013

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Abstract

Curriculum 2013 requires elementary school physical education teachers to conduct the instructional process using thematic approach and integrate it with other subject matters. This article offers a model of integrated thematic physical education games for Grade I students. Based on student's growth and development phase, playing and game are recommended for this group of students. The offered model consists of: (1) Ordering Number with New Friends Game, (2) Puzzle Constructing Game, (3) Addition Drawing Game, (4) Ball Squeezing and Throwing Game, and (5) Sport Guessing Game. Physical education teachers, especially in the elementary school, could use the model as an alternative in conducting physical education lessons based on Curriculum 2013, which is fun, attractive, meaningful and challenging for students.

Keywords: Game Model, Integrated Thematic, Physical Education, Grade I Student, Curriculum 2013

INTRODUCTION

Curriculum 2013 was launched in July 2013. This curriculum refines the previous ones, that is KBK (competence-based curriculum) and KTSP 2006 (school-based curriculum). Curriculum 2013 has not been implemented yet at every school, but will be gradually applied in Indonesia from 2013 to 2016. Initially, it is implemented at 2.598 elementary schools, 1.521 junior high schools, 1.270 senior high schools, 1.021 vocational schools. The number of schools

which implement it is 132 in DI Aceh, 203 in Bali, 881 in Central Java, 887 in West Java, 1.053 in East Java, 263 in North Sumatra, 225 in Banten, 146 in DIY, and 250 in Jakarta (<http://dikmen.kemdikbud.go.id/html/index.php?id=berita&kode=282>). Moreover, not every class implements it, but only Grades I, IV, VII, and X (<http://www.antaraneews.com/berita/397936/wamendikbud-yakin-kurikulum-2013-berjalan-car>). This curriculum change is hoped to bring about benefit on whole education in Indonesia.





The hope of positive change from Curriculum 2013 is not apart from its superiority over the previous curriculum (Hari A. Rahman, 2013), i.e.: (1) in KTSP 2006, a certain subject matter supports certain competence, while in Curriculum 2013, each subject matter supports all competences (affective, psychomotor, cognitive), (2) a subject matter in KTSP 2006 is designed to stand-alone and has its own competence, while a subject matter in Curriculum 2013 is designed to be related to other subject matters and has basic competence bound by core competence at every class, (3) especially for KTSP 2006 at elementary school, each learning content is given separately, while in Curriculum 2013, learning contents are given in a mutually interrelated and integrated way (cross-curriculum or integrated curriculum).

The superiorities of Curriculum 2013 contrast with problems that appear in many regions because of its implementation. For example, Jember and Malang regions cannot implement it because there are many teachers who were not trained yet, West Nusa Tenggara region is not ready to implement it because they are still socializing it, Solo and some other regions are not receiving all of Curriculum 2013 books yet, and Salatiga region faces a limited number of Curriculum 2013 guidance books and is confused with the assessment report system in Curriculum 2013 because they did not yet get technical direction of it (Tribunnews.com

and Suaramerdeka.com). Those problems, especially the readiness of teachers as a curriculum implementer, need to be solved quickly.

Basically, the central point of Curriculum 2013 execution is placed on the teacher. Teachers as spearhead of curriculum should know in detail of what and how to transfer curriculum in their instructional process. Therefore, teachers need to learn and enhance their knowledge about the way to implement Curriculum 2013. Moreover, Curriculum 2013 is a new thing for teachers, e.g. integrated thematic approach used in elementary school which was thematic approach on the previous curriculum, requires teacher to design learning model that integrate one subject matter with others.

Integrated thematic approach is applied on every subject in elementary school, not to mention physical education. Therefore, physical education teachers need to improve their knowledge about it. Teachers also need to consider the student characteristic in conducting curriculum. For example, the Grade I student has different characteristics from the later grade student, so that different learning models is needed. This article intend to offer integrated thematic physical education game model for Grade I student that has aim to add knowledge and insight of elementary school physical education teachers in planning their instructional process related to Curriculum





2013. The model could be used as alternative in conducting physical education lesson based on Curriculum 2013.

DISCUSSION

Integrated Thematic Learning Model

Integrated thematic approach is the propulsion mean of Curriculum 2013 at elementary school level. It is defined as an interdisciplinary learning approach that present subject matter by themes or topics and integrate knowledge from different disciplines

(<http://www.ncrel.org/sdrs/areas/issues/students/atrisk/at7lk12.htm>). Beane stated the same idea that knowledge and skill are integrated in integrated thematic learning on theme and activity context (Min, K.C., Rashid, A.M., & Nazri, M.I., 2012). Ross & Olsen (Cook, 2009) described that integrated model consist of central theme with daily, weekly, monthly, and yearly topic, keypoint, and social/politic action. Further, Cone, Warner, & Cone (2009:4) stated integrated thematic in an interdisciplinary education term, which is process where two or more subjects are integrated with objective to encourage learning improvement on each subject. The benefit of this approach is that the student learn better than using traditional learning that only involve one subject (Yorks & Follo in Kon Chon Min et al., 2012). The conclusion is that integrated thematic learning is learning which integrate two or more subjects using connected topic or theme and has objective

that student learn better so that encourage learning improvement in every subject.

Cone, Warner, & Cone (2009: 5) explained that the benefit of integrated thematic approach or interdisciplinary learning are: (1) providing a new way to present and use concept and skill, (2) enhancing critical thinking skill, such as analyze, synthesize, and evaluate, (3) involving students in a collaborative learning approach, in which students can use their strength to contribute on task or learning problem, (4) motivating students because the learning process is fun and meaningful, (5) encouraging teachers to collaborate, increasing their understanding on other area, and developing collegial relationship, (6) improving ability to know and understand many perspectives, (7) helping to develop creative and divergent thinking skill, (8) teaching student to use many sources to understand one issue, and (9) showing the knowledge transfer from one learning context to another.

Integrated thematic approach has significant differences to conventional learning model that focus on one subject matter. Based on that, the teacher needs to prepare different instructional process. Specifically on physical education, the teacher needs to make relation between that with other subject, e.g. Mathematic, Bahasa Indonesia, and Civic- Education. This condition may cause teacher to spend longer time in preparing and structuring the





instructional process. Teacher need to rethink about what subjects, basic competences, and core competences that could be integrated, what theme that suitable for different subjects, and how to deliver the learning. Teacher also needs to discuss with teachers from other subject matter about what competence that could be collaborated and also need to learn the substance of other subject matter. The complexities will be more if the the teacher has no or little understanding about the concept of integrated thematic and how to conduct the lesson using that model.

The Principle of Selecting the Type of Game for Learning

Learning process could be delivered through playing game. There are some types of games that could be used, such as *quiet play*, *creative play*, *active play*, *cooperative play*, *dramatic play*, and *manipulative play* (Morrisey, Beth, 2012 and

First, Quiet play is a type of game which is not need many energy and space, i.e. reading, listening to music, and coloring. *Second*, Creative Play is a type of game that need creativity, i.e. acting, drawing, and painting. *Third*, Active Play is a type of game that need physical movement and it make children burn their callory, i.e. *gobag-sodor*, football, and chase. *Fourth*, Cooperative Play is a type of game that involved more than one person, so that children need to use their social skill when play and cooperate. *Fifth*,

Dramatic Play is a type of game that make children using their imagination by being different character or live in the world they made. Sixth, Manipulative Play is a type of game that involved the using of hand, muscle, and eye, i.e. playing puzzle, cutting, and building block.

To choose types of game that is suitable with physical education learning, there are some principles need to be considered (Erwin S. Kriswanto, 2008), that are: (1) the game could develop physical aspect, (2) there is balance between quiet play and active play in indoor or outdoor setting, (3) there are many game variation to control students attention, (4) the game could giving students learning experience, (5) the game suitable with students age, and (6) give chance to the students to use their imagination and creativity.

An Integrated Thematic Physical Education Game Model for Grade I Students

1. Ordering Number with New Friends Game

Theme: Myself, Subtheme: Me and My New Friends

Goals:

- Student can order number 1 through 5 with new friends (Mathematic)
- Student shows confidence, discipline, and cooperative attitude (Civic Education)



- c. Student can introduce himself/herself to new friends (Bahasa Indonesia)
- d. Student can write number 1 through 5 (Physical Education)
- e. Student can hop and jump (Physical Education)

Equipment: model of number 1-5, paper at size 20 cm x 20 cm for all of children, colorful marker for all of children.

How to play:

- a. Teacher asks children to make circle formation.
- b. Teacher explains about number 1-5 using a model number and the concept of ordering number from small to bigger.
- c. Teacher asks students to count 1-5 respectively and to remember their number
- d. Teacher guides students to write their number on paper using colorful marker

- and asks children to hold it in front of their chest.
- e. Teacher asks students to spread out and ordering number 1-5 with their new friends by stand up together in one line from smaller number to bigger number (1-5).
- f. Students only may move by doing hopping and jumping when looking new friends to order number. Students should ask friend's name before asking them to order number together.
- g. Teacher checks students answer and checks whether student remembers their friends name.



Figure 1. Illustration of Ordering Number with New Friends Game

2. Puzzle Constructing Game

Theme : Myself, Subtheme: My Body

Goals :

- a. Student can construct pieces of body's picture with his friends (Culture art and craft)



- b. Student can read and mention body parts (Bahasa Indonesia)
- c. Student shows confidence, discipline, and cooperative attitude (Civic Education)
- d. Student can thicken the letter (Culture art and craft, and Physical Education)
- e. Student can do side run and backward walk (Physical Education)

Equipment: model of body, body's picture that is cuted into 7 pieces for every group, paper glue, marker for all of children, pieces of body's picture with the explanation text under it in which some of the letter is the dotted line.

- e. At the finish line, students thicken the letters on the place provided. Each student is thicken the letter on one picture.
- f. Students go back to the start line by doing backward walking.
- g. Teacher checks the student's work.
- h. Teacher asks students to read the word of body part in the picture and

How to Play:

- a. Teacher divides students into groups, one group consists of maximal 5 students.
- b. Teacher asks and explains about the body part using model.
- c. The game starts by which each group trying to construct pieces of body's picture that are on start line using paper glue.
- d. After that, all of group members go to finish line by doing side run.

- then touch it at his body or at his friend's body.
- i. The fastest and most right group is the winner.

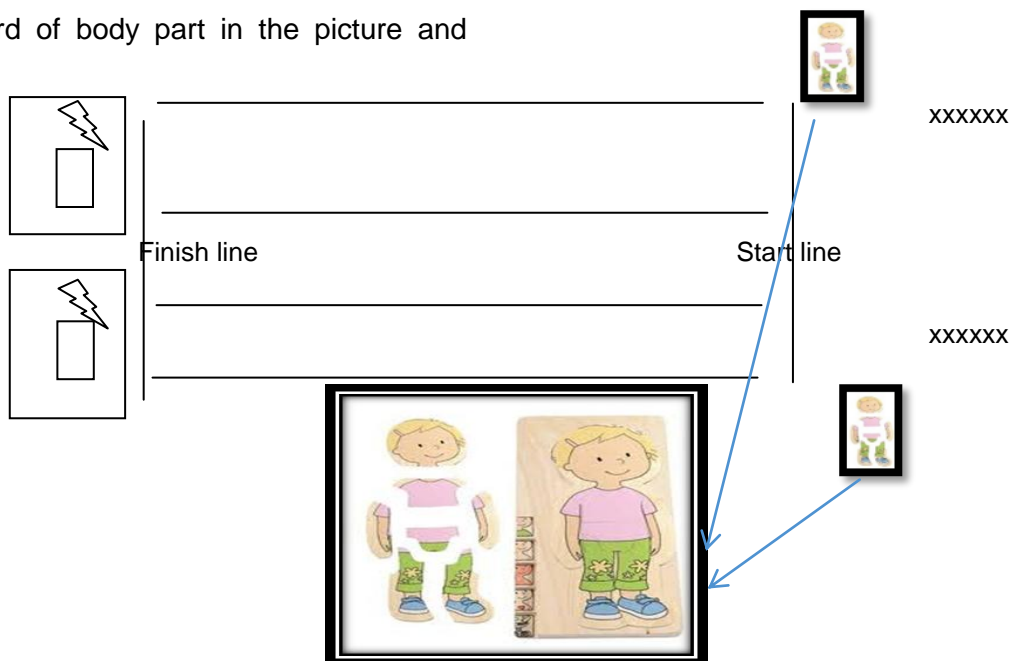


Figure 2. Illustration of Puzzle Constructing Game

Source of picture:
<http://www.walkingsticktoys.com/index.php/ID/893afc57415a304bcc6777ad1a16dd7e/item/Body-Puzzle-Girl/sID/a8bbb64a/fuseaction/store.detail.htm>

marker, 10 colorful paper for jumping area at size 20 cm x 20 cm for each group

How to Play:

3. Addition Drawing Game

Theme : Myself, Subtheme: My Body

Goals :

- a. Student can do addition until 10 (Mathematic)
- b. Student shows confidence, discipline, and follow the rule of the game (Civic Education)
- c. Student can do locomotor movements by run following number shape and write it on the paper (Culture art and craft, Mathematic and Physical Education)
- d. Student can jump following the path of box (Physical Education)

- a. teacher explains about an addition and give example.
- b. To do the game, student goes to the finish line by jumping on boxes area provided.
- c. Student answer the question on finish line by running in form of his answer (drawing his answer by run)
- d. Student writes down the answer on the paper. Teacher checks the student answer.
- e. Student goes back to the start line by jumping on boxes area provided.

Equipments: Addition question in the form of picture for all of students,

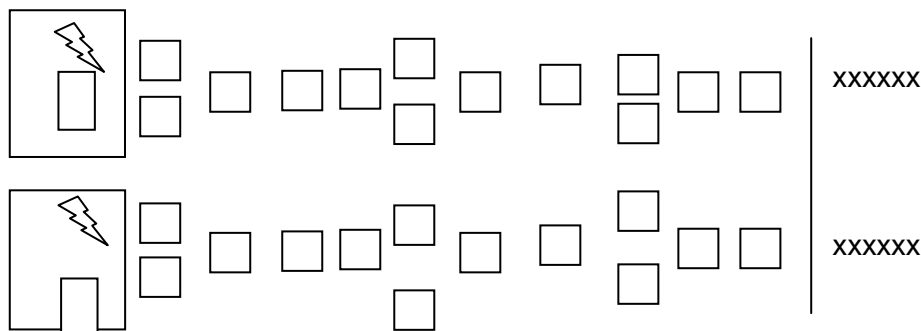


Figure 3. Illustration of Addition Drawing Game





4. Squeezing and Throwing Game

Theme : Me, Subtheme: Me and My New Friends

Goals :

- a. Student can introduce themselves by mention their nickname and asking favourite color of friends (Bahasa Indonesia)
- b. Student can mention their friends name (Bahasa Indonesia)
- c. Student shows confidence and follows the rule of the game (Civic Education)
- d. Student can do a locomotor movement that is zigzag crawl (Culture art and craft and Physical Education)
- e. Student can squeeze paper to shape ball (Physical Education)
- f. Student can throw the ball the basket (Physical Education)

Equipment: colorful paper as much as twice of children number, one basket for each group, marker area as a sign place to throw.

How to Play:

- a. Teacher asks students to introduce themselves to their friends and asking their favourite color.
- b. Teacher asks students to pick 2 colorful papers based on favourite color of one of their friend and squeeze it to make ball.
- c. Teacher divides student into some groups.

- d. Student on the first line of each group presents his friend name and his favourite color based one paper ball that he had made.
- e. Students are doing zigzag crawl from start line to finish line while bringing his paper ball.
- f. Students throw the paper ball to the basket using both right and left hand.
- g. Students are going back to the start line by doing zigzag crawl, toast with his friend who will do similar activity.
- h. Teacher reviews student activity and asks the number of ball that success get in the basket



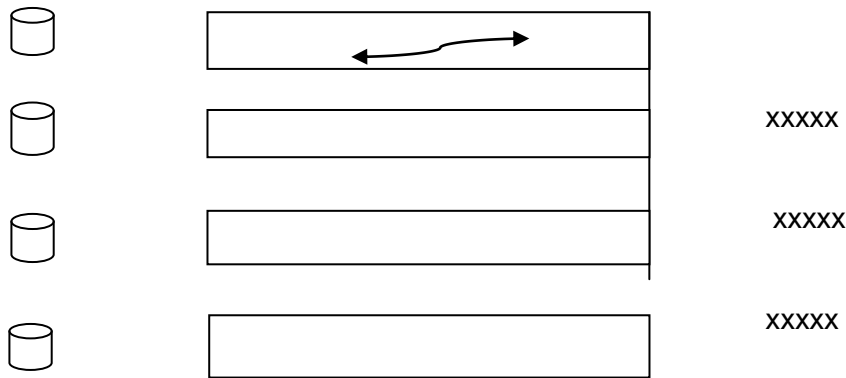


Figure 4. Illustration of Ball Squeezing and Throwing Game

5. Sport Guessing Game

Theme : My Favourite, Subtheme: Love Doing Sports

Goals :

- a. Student can follow the rule of the game (Civic Education)
- b. Student can confidence to explain sport activity by doing body movement (SBDP)
- c. Student can recognize and make ball/circle shape using paper (Mathematic)
- d. Student can complete the letter of the word based on the picture provided (Bahasa Indonesia)
- e. Student can do a locomotor movement on specific sport, such as badminton, tennis, basketball, and swimming (Physical Education)
- f. Student can run and jump through bomb pictures (Physical Education)

Equipment: cards of sport equipment picture as much as students with an explanation of equipment's name under it

and some of the letter of the word are eliminated, eight bomb pictures at 20 cm x 20 cm for each group, marker.

How to Play:

- a. Students are divided into some groups.
- b. Students on the first line run and jump through bomb pictures to the finish line.
- c. Students complete the letter of sport equipment name and go back to the start line in the same way.
- d. Students practice or model the sport based on the card that he had completed, and their group trying to guess.
- e. After being guessed, the next student doing the same thing.
- f. The group who finish first is the winner.



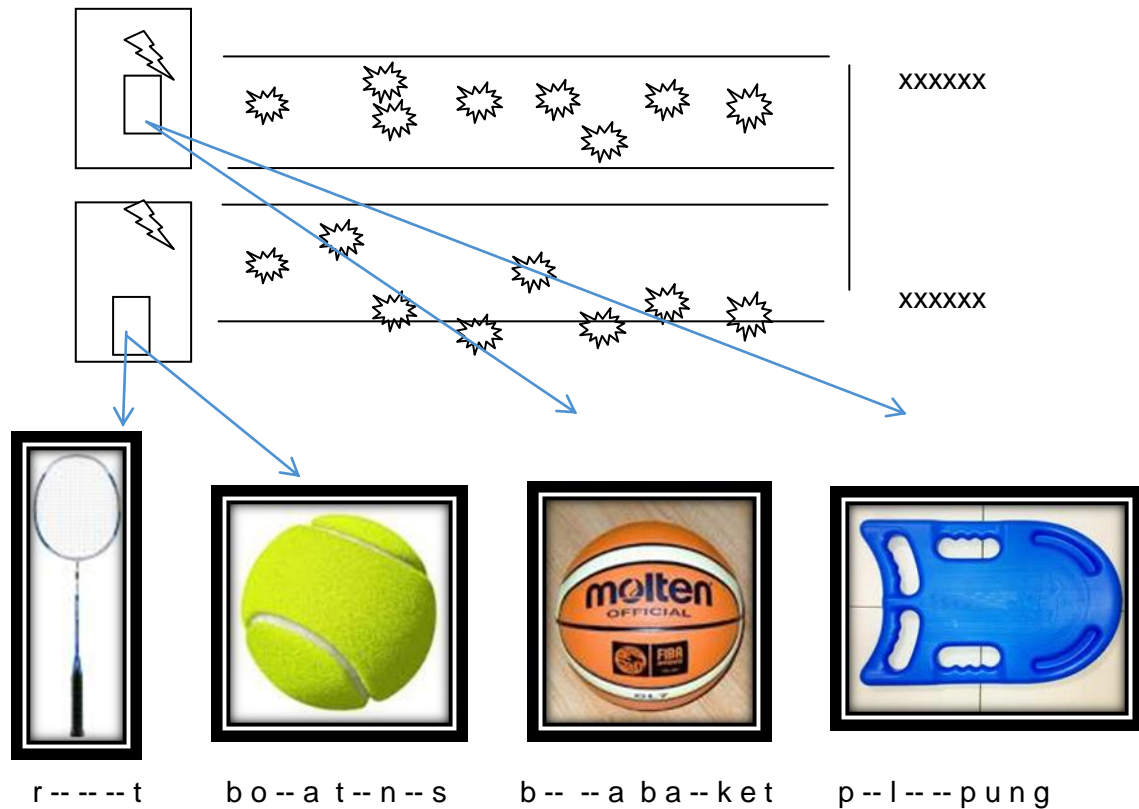


Figure 5. Illustration of Sport Guessing Game

CONCLUSION

Curriculum 2013 requires elementary school physical education teachers to conduct their instructional process using an integrated thematic approach. Teachers need to enhance their knowledge so that they can conduct learning process appropriate with curriculum guide. This article offers an integrated thematic physical education game model for Grade I students, consists of: (1) Ordering Number with New Friends Game, (2) Puzzle Constructing Game, (3) Addition

Drawing Game, (4) Ball Squeezing and Throwing Game, and (5) Sport Guessing Game. Those games are designed specifically so that physical education and other subject matters learning goals could be addressed in situation which is fun, attractive, meaningful and challenging for students. Interesting games will make students happy and make their mind opened so they could connect the linkage between one subject matter to another and take benefit from it to their life.





REFERENCES:

- NN. 5th July 2013. *Kemdikbud Keluarkan Data Terbaru Jumlah Sekolah Pelaksana Kurikulum 2013*. Accessed on 15th October. <http://www.antaraneews.com/berita/397936/wamendikbud-yakin-kurikulum-2013-berjalan-lancar>.
- NN. 16th July 2013. *Kurikulum 2013: Implementasi Masih Bermasalah*. [Tribunnews.com](http://tribunnews.com). Accessed on 15th October 2013.
- Cone, T.P.et al., Werner, P. & Cone, S.C. 2009. *Interdisciplinary Elementary Physical Education Second Edition*. Champaign: Human Kinetics.
- Cook, S. C. 2009. Making Connection: Implementing an Integrated Thematic Instruction Curriculum Models to Assist Teacher of At-Risk Middle School Students.Dissertation. New Jersey: Graduate School of Rowan University.
- Erwin S. Kriswanto. 2008. Model Pembelajaran dan Prinsip Bermain Pencak Silat untuk Anak Prasekolah. *Jurnal Pendidikan Jasmani Indonesia*. Vol. 3, No.3, Hal. 70-78. Yogyakarta: Jurusan POR FIK UNY.
- Hari A. Rahman. 2013. Rasional Kurikulum 2013 dan Implikasinya terhadap Pengembangan Pembelajaran di Prodi PJKR. Makalah disampaikan pada Srawung Ilmiah Dosen Jurusan Pendidikan Olahraga FIK UNY. Jumat, 19th July 2013. Yogyakarta.
- <http://dikmen.kemdikbud.go.id/html/index.php?id=berita&kode=282>). Accessed on 23rd October 2013.
- <http://www.ncrel.org/sdrs/areas/issues/students/atrisk/at7lk12.htm>. Accessed on 15th October 2010.
- <http://www.nncc.org/Curriculum/better.play.html>. Accessed on 24th October 2012.
- <http://www.walkingsticktoys.com/index.php/ID/893afc57415a304bcc6777ad1a16dd7e/item/Body-Puzzle-Girl/sID/a8bbb64a/fuseaction/store.detail.htm>. Accessed on 23rd October 2013.
- Min, K.C., Rashid, A.M., & Nazri, M.I. 2012. Teachers' Understanding and Practice towards Thematic Approach in Teaching Integrated Living Skills (ILS) in Malaysia. *International Journal of Humanities and Social Science*. 2(23): 273-281.
- Morrisey, Beth. (2012). *Enhancing Development through Play*. <http://www.Kidsdevelopment.co.uk/%20EnhancingDevelopmentThrougPlay.html>. Accessed on 24th October 2012.
- Wijayanto, W. 9th September 2013. *Pelaksanaan Kurikulum 2013 di*



THE 3rd INTERNATIONAL SEMINAR ON PE, SPORT & HEALTH 2013



*Salatiga Masih Menyisakan
Persoalan. Suaramerdeka.com.*

Accessed on 15th October 2013.





DIFFERENT PRACTICES OF PLYOMETRIC BETWEEN CONVENTIONAL WITH MODIFICATIONS TO EXPLOSIVE POWER OF LEGS AND HANDSPRING SCORE

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INTRODUCTION

Background of the Study

In general, general gymnastics development in Indonesia is fastly growing because of its pleasant characteristics and its body refreshing function that are needed in one's activities. It is different from the artistic gymnastics that are obscurely known due to the lack of facilities, human resources, and process of its socialization. Artistic gymnastics in Indonesia is known better as performance sport or apparatus sport. Artistic gymnastics is a type of gymnastics that combines the degree of movement difficulties with flexibility and aesthetics elements (Soewandie, 1998).

One dominant element in Gymnastics is the explosive power since this sport uses feet in most of its movement as a footing to jump either from a mattress or from a springboard. Mostly, to land from a jump, gymnasts also need to use their feet. One basic routine that is oftenly used by gymnasts in each apparatus is either a one foot handspring or a two feet handspring. This

routine needs the gymnasts' explosive leg muscle power generated when they rest on springboard before their palms touching the vaults in a handstand position.

Handspring itself really needs speed and power especially on feet and hands to generate. The exercise to develop the explosive power needs strength, speed, balance, and coordination exercises (Nossek, 1982). Plyometrics exercise is one perfect

example of exercise that owns the whole components that are stated because plyometrics itself is a method to develop explosive power (Radcliffe, 1999). Several factors contribute directly in the explosive exercise includes muscle activation rate, and synchronization (Stone, 1989).

Based on the statements above, there is an urge to conduct a research to find the influence and to compare the result of effectiveness between conventional plyometrics exercise and the modified one. The conventional plyometrics exercise is an exercise model that has been applied by a gymnastics coach in an exercise process. On the other hand, modified plyometrics exercise





is an exercise model that never been applied by the coaches in Science Gymnastics club and it will be applied in the exercise process as a routine innovation that is adopted appropriately from a handspring technique in order to find the exercises' effects toward the improvement of an explosive leg muscle power and the perfection of handspring technique to get the handspring score improved.

Research Questions

1. Does the conventional plyometrics exercise contribute to the improvement of explosive leg muscle power and handspring score?
2. Does the modified plyometrics exercise contribute to the improvement of explosive leg muscle power and handspring score?
3. Are there any differences in the result between the modified plyometrics exercise and conventional plyometrics exercise toward the explosive leg muscle power and handspring score?

Research Objectives

General Objectives

1. To get the appropriate methods of limb and body position plyometric exercise while doing handstand to fix the perfection of handspring technique in vault with this following steps (1) scoring of

handspring, (2) scoring of the next step.

2. To compare the effects of modified plyometrics exercise to conventional plyometrics exercise toward the improvement of explosive leg muscle power and handspring score.

Specified Objectives

1. To prove that the practice of conventional plyometrics exercise can improve the explosive leg muscle power and handspring score.
2. To prove that plyometrics training can improve the the explosive leg muscle power and handspring score.
3. To prove that there are differences in result of modified plyometrics exercise and conventional plyometrics exercise toward the improvement of explosive leg muscle power and handspring score.

Review of Related Literature

Exercise

Exercise is defined as a systematic role that aims to increase the capacity of physical function and the endurance of exercise (Pate, 1993). In the end, sport aims





to increase its performance. According to Yusuf, exercise is a systematic process from repeatedly training with an extended training load and intensity of each day (1996).

Besides, exercise is a process to our body to adapt to the working needs that are harder in preparing ourselves to face the competition atmosphere and to increase the athletes' skills (Basuki, 1979).

Exercise is one of the physical stressor that can disturb the stability of homeostasis (Morehouse, 1976). Therefore, the use of exercise packaged in a physical training needs an appropriate measure of dose to give chance to form a coping mechanism that can change the stressor into stimulator. However, if the training dose given is not appropriate, the stressor can make the homeostasis of the body is disturbed and causing harmful biological/pathological disorders to happen (Sugiharto, 2003).

Exercise principles

In designing exercise program, coach has to consider the interactions between exercise procedures individually and the exercise process thoroughly. The optimal exercise program is an exercise that is conducted based on some principles. The special attention from the coach is needed for each athlete to get an optimal improvement (Pate, 1993).

The program and/or the appropriate dose of the exercise should consider several exercise elements such as: frequency,

intensity, duration, and exercise set. Allister's research (1991) says that the exercise that is going for a 12 weeks will lead to the improvement of muscle response in facing exhaustion because the oxygen transport in blood to the cells will function better.

The exercise program should be guided on these following principles:

a. Overload principle

The physiology system of this overload principle is mostly adaptable to the functions that is placed under greater stress than it is accustomed to (Pate, 1993). However, thing that we should keep in mind is to prevent outrageously overloading since the physiology system is not adaptable to a very excessive pressure.

The received loads are individual, but in principle the loads are given to its maximum limit (Brooks, 1984:161). Training loads that are hard enough or close to the maximum limit of ability can affect to the improvement of physical ability.

b. Progressive overload principle

This principle has to be done continually and the *exercise should also be adjusted to the ability of each athlete. The muscle that receives the overload will have the strength increased. Then, if the strength is increased, the extra overload should be given by easy stages so that the muscle's strength will be increased.*





The overload should be done progressively (Sajoto, 1988).

c. Specificity principle

Specificity is a branch of exercises that leads to the morphological and functional change that are related to the specificity of its branch (Bompa, 1990). For example, it takes a specified exercise depends on the muscle type, contraction, and also exercise intensity in a muscle formation (Heyward, 1997).

d. Individuality principle

This factor needs to be noticed more than the others because everyone has different characteristics either physically or psychologically. In this case, the working capacity and the adjustment of individual functional capacity and the specificity of organism are the things that need to be noticed (Supriyadi, 1999).

e. Reversibility

If we do not maintain the exercise, its condition will be back to what it was (Soekarman, 1987). Therefore, the exercise should be done continually in order to prevent the reduction of physiological ability of body where physical conditions of body before and after the exercise are the same.

Muscular Power

Muscular power is one's ability to generate a maximum power in a minimum time (Sajoto, 1988).

Power

Power is a physical condition component that relates to the athlete's problem in using their muscles to receive loads in a certain period of time (Sajoto, 1988).

Speed

Speed is the ability of someone in doing continuous routines in the same formation in a minimum time. Speed has a strong relation to the movement's speed and explosive (Sajoto, 1988).

Coordination

Coordination is the ability of someone to integrate different movements into a single patterned movement effectively (Sajoto, 1988). According to Kirkendall (1990) coordination is a harmonious relationship of several muscles while doing activity as a criteria of a certain skill.

Plyometrics Exercise

Several figures define the plyometrics exercise as follows:

- a. Plyometrics is a method that is used to develop explosive power (Radcliffe, 1999). This exercise has a specific characteristic which is a very strong muscle contraction that is actually a response from a dynamic loading or a quick strain from the involved muscles.
- b. According to Frontera (2007), plyometrics exercise pictures a very quick muscular power and followed by concentric contraction. The level of elasticity and the





joints load of each person are different from one to another.

- c. According to Diallo (2001), plyometric exercise is an exercise that enables the muscles to reach a maximum power in a minimum time.

From the definitions above, we can conclude that plyometrics exercise is an exercise that combines isometrics and isotonic exercises (eccentric-concentric) that uses dynamic loading, a sudden strain that happens before the muscles contracted.

General guidance of plyometrics exercise

In plyometrics exercise, there is guidance that needs to be followed to reach the aims of the exercise. Several plyometrics exercise guidance that need to be known are as follow:

1. Duration of working period : 6 – 8 seconds.
2. Working intensity : maximum
3. Recovery duration : 1 - 2 minutes
4. Repetition of working sets : 8 – 10 (Plyometric training).

Specified guidance of plyometrics training

Exercising with high intensity yet generated in a short time takes phosphagen energy system (ATP) that is needed for muscle contraction. If the exercise needs speed and maximum power to be reached in a short time, it is called as anaerobic exercise. The classification of the role of energy system is shown from the table below:

Table 2.1. The role of energy system

Exercise duration	Classification	Primary energy source
1 - 4 seconds	Anaerobic (alactacid)	ATP (inside muscles)
4 – 20 seconds	Anaerobic	ATP + PC
30 – 45 seconds	Anaerobic	ATP + PC + Glycogen of muscles
45 – 120 seconds	Anaerobic, lactic	Glycogen of muscles
120 – 240 seconds	Aerobic + Anaerobic	Glycogen of muscles + Lactic acid
240 – 600 seconds	Aerobic	Glycogen of muscles + Fatty acid

(Asmi, 2002)



Plyometrics exercise itself needs maximum power and speed as it uses ATP energy system, therefore, recovery time is needed to have a maximum result of exercise. According to Fox (1993), the maximum exercise needs a two-to-five minutes muscle recovery.

a. Hurdle jump



Figure 1. Hurdle jump

Goals:

1. To develop a dynamic elasticity of hip joint
2. To develop the strength and muscular power.
3. Strengthen abdominals

b. Handstand push up

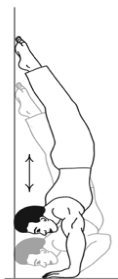


Figure 2. Handstand Push up

Goal:

To develop the power of shoulder and elbow's drive and also upper part of the body.

Conventional plyometrics exercise

The intention of this conventional plyometrics exercise is: either junior or senior athletes are still using the kind of exercise that is oftenly used.



Benefit points:

To improve the power of shoulder and elbow's drive (Radcliffe, 1999). Next, to improve upper body part's drive.

plyometrics exercise that never been used at all to specifically used in a handspring on vaults by a gymnastics coach at Science Gymnastic Club.

Modified plyometrics exercise

What is meant by modified plyometrics exercise is a kind of modified

a. Standing broad jump

Standing broad jump is one of exercise methods to improve the explosive leg muscle power in reaching the front target.



Figure 3. *Standing Broad Jump*

Goal:

To find the vertical and horizontal strength of two limbs by combining stability and coordination components (standing broad jump test).

Handspring hop is a kind of exercise models that is similar to handspring move as an effort to reach the handspring itself. Handspring hop is meant to train the shoulder and arms to repulse quickly in a handstand position on a spring board or box.

Benefit point:

To improve the vertical and horizontal strength of two limbs (*standing broad jump test, 2007*).

b. Handspring hop

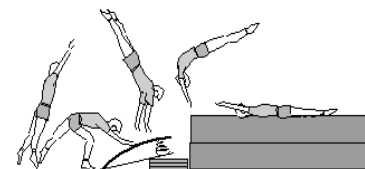


Figure 4. *Handspring Hop*



There are two main points that are needed to train this action:

1. To push the shoulder quickly
2. Bounce movement.

Goals:

1. To increase the strength of shoulder drive.
2. To develop the movement that is automatically similar to handspring.

Benefit point:



Figure 5. *Handspring* (Prassas, Colorado State University).

To develop a correct and accurate handspring technique (Watanabe, 1997).

Handspring

Handspring is a basic artistic gymnastics routine on vaults for both male and female gymnasts. This routine needs a muscular power both from legs and arms.

Judging system

Judging system in gymnastics is subjective while still based on the applied rules from *Code of Points FIG Rule year 2007*.

The judging is done by several E panel judges by **removing the highest and lowest scores** and counting the average of the remaining scores.

The gymnast gets the initial score of 2.40 P for handspring (*Code of Points FIG 2007*).

E judges : give score reductions generally starts from the first swing phase until the landing phase. The judging is given from 10.00 P and the total number of reduction score is subtracted from it.

Score determination

Score determination for handspring is as the following:

Formula: Initial score + E panel score = total score



Power measurement test

1. Explosive leg muscle power

Explosive leg muscle power test is a kind of test to measure the explosive leg muscle power forward (Johnson & Nelson, 2000).



Figure 6. *Standing Broad Jump Test*

Next, if we want to measure the explosive leg muscle power vertically, we are going to use vertical jump test

because the handspring itself will need to use the vertical explosive leg muscle power



Figure 7. *Vertical Jump Test*

Research Design and Type

The Pretest – Posttest control group design (Zainudin, 2000).

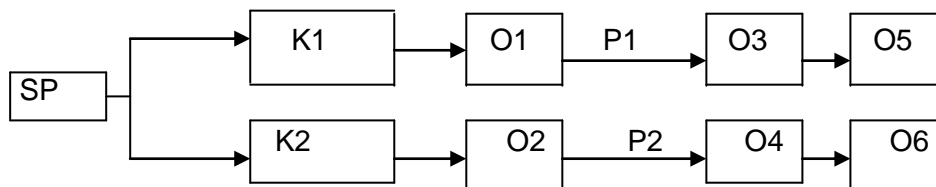


Figure 8. Scheme of *pretest – posttest control group research design*

Details:

SP : Research subject (sample)





- K1 : Control Group and Treatment Group of Conventional Plyometrics
- K2 : Treatment Group of Modified Plyometrics
- O1 : Pretest of group I
- O2 : Pretest of group II
- P1 : Treatment of group I
- P2 : Treatment of group II
- O3 : Posttest of group I after 3 weeks
- O4 : Posttest of group II after 3 weeks
- O5 : Posttest of group I after 6 weeks
- O6 : Posttest of group II after 6 weeks

Details:
 n = Amount of sample
 $Z\alpha =$ standard value α 0,05 = 1,65
 $Z\beta =$ standard value β 0,2 = 0,842
 $\sum D =$ standard deviation
 $\delta =$ mean differences of control group and treatment group

Total number of the population is divided into two by drawing technique of eight athletes in each group. Then, formed two groups as the result of previous step which the conventional plyometrics group belongs to group 1 and the modified plyometrics group belongs to the group 2.

Population, Sample, Amount of Sample and Sampling Technique

Subject that is used in this research are junior athletes of Science Gymnastic Club.

The number of sample in this research is limited, therefore the existing population is chosen as a whole and it is usually called as "Whole Sample". Based on the things above, the calculation uses this following formula:

$$n = (Z\alpha + Z\beta)^2 \sum D^2 / \delta^2$$

With $\sum D^2 / \delta^2 = 1$, so

$$n = (Z\alpha + Z\beta)^2$$

$$n = (1,65 + 0,842)^2$$

$$n = 6,21 \text{ assumed into } 7 \text{ (Steel \& Torrie, 1981).}$$

Research Variables

Independent variable

- a. Conventional plyometrics exercise (*hurdle jump and handstand push up*).
- b. Modified plyometrics exercise (*standing broad jump and handspring hop*).

Dependent variable

- 1. Explosive leg muscle power (*vertical jump and standing broad jump*).
- 2. Handspring on vaults' score

Control variable

- a. Sex



The sex of the research subject is female junior athletes who are trained in Science Gymnastics Club.

b. Age

The age of research subject lies between 9-12 years.

Moderator Variable

a. Height (cm).

b. Weight (kg).

Operational Variable Definition

Generally, variable is declared as an operation of a particular concept. Therefore, variable is a concept that can be analyzed and measured to find the variation (Zainudin, 2000).

1. Explosive leg muscle power

The implementation of explosive leg muscle power test by using standing broad jump owns its best result which is jump as far as possible and the distance is measured in the units of meter and centimeter

The measurement of vertical muscle power using vertical jump test is to measure the strength or power of vertical jump.

2. Conventional plyometrics exercise (hurdle jump and handstand push up)

Plyometrics exercise using hurdle jump is a kind of exercise to develop the leg's power especially the

knees to jump to the expected height. This exercise is done by jumping over the hurdle continuously as many as 8 jumps. The amount of sets in each exercise is 3 to 8 sets with a minute break for each set. The frequency of the exercise is 3 times per week.

Different from the hurdle jump, plyometrics exercise using handstand push up is done on the wall to hold the body against the different direction. Both of the palms are placed on the floor and the two legs are stuck up on the wall so that the handstand action is formed. This action is done by bending two arms down until the head is touching the floor. Then, straighten the arms back to a very straight position. This action is done 5 times. The sets amount of each exercise is 3 to 8 sets with a minute break for each set. The exercise frequency is 3 times per week.

3. Modified plyometrics exercise (standing broad jump and handspring hop)

Plyometrics exercise by using standing broad jump is done directly. The jump is performed as far as possible with a one foot footing and two feet landing and then another jump is performed with those two feet, and land also two feet. The jump repetition is 8 times and the amount of





exercise is 3 to 8 sets with a minute break for each set. The exercise frequency is 3 times a week.

Plyometrics exercise by using handspring hop modifies the real handspring to gain a skill in handspring directly. The repetition of this exercise 5 times and the amount of exercise is 3 to 8 sets with a minute break for each set. The exercise frequency is 3 times a week

5. Handspring score

Score is a final form of score from a handspring on vaults with 2 numbers after point. The score is given after the gymnasts perform handspring action and judged by 4 B panel judges.

6. Sex

The sex is a female sex that is mentioned in the family card of the gymnasts.

7. Age

The age of the gymnasts in year is looked from the family card.

8. Height and weight

The height measurement is in centimeter and the weight is in kilogram are measured by using an SMIT Health Scale (body scale and height gauge) type ZT – 120 with the tool's accuracy of a number after point

Muscular Power Measurement

1. Explosive leg muscle power

A. The application procedure of standing broad jump test is as follow:

1. The gymnast is standing before the demarcation line, the two feet are aligned, the knees are bent, and the two arms are on their back.
2. Without using a start, the two feet repulse together and jump forward as far as possible.
3. The jump distance is measured from the demarcation line to the closest line to the body part that touches the mattress (Johnson & Nelson, 2000).

B. The application procedure of vertical jump line is as follow:

1. Use jump MD tool on the waist tightly.
2. The gymnast is standing on the black carpet as the place to jump and to land.
3. Take a start based on the needs of the gymnast while still standing on the black carpet.
4. The gymnast jumps as high as possible with a help of their arm swing.

2. The judging of handspring score in vaults

The determination of handspring score is as follow:





The gymnast gets an initial score of 2.40 (Code of Points FIG 2007).

Judges : to give the score reduction generally starts from the first

swing phase to the landing phase. The scoring is given from 10.00 P and reduced by the whole reduction.

Formula: Initial score + judges score = final score

Result of the Research

The result of the research that is obtained from the conventional plyometrics group is as follow: (1) The vertical power of leg muscle vertically experiences a meaningful power improvement between time through vertical jump test for ($F = 39,186, p < 0,05$), (2) The power of leg muscle forward is also experiencing improvement although it is not too much for ($F = 6,698, p < 0,05$), (3) The power of arms muscle is experiencing a meaningful improvement between time ($F = 6,937, p < 0,05$). This result is obtained from a handstand push up test. While the handspring score for this group is also improved for ($F = 28,258, p < 0,05$). In modified plyometrics group, the result is as follow: (1) The vertical power of leg muscle is having a meaningful difference between time for ($F = 2,325, p > 0,05$). The improvement of this modified group is a little bit higher if compared to the conventional group although it is not much, (2) The power of leg muscle forward is also having a meaningful difference between time ($F = 5,449, p < 0,05$). Seems that the change of standing broad jump of modified group is a little bit

higher than the conventional group. This is caused from the goal of the exercise program of standing broad jump to improve the power of leg muscle vertically as well as horizontally (3) The power of arm muscle in this modified group seemed to degrade at first and improved rapidly after that. In this condition, the muscle adaptation starts to degrade gradually because of the exercise program that was always using push up as the warming up but was not done in the research process. The arm muscle that has a gradual power in the beginning experiences a degradation because of the thing that has been stated before. However, there is a significant improvement between time in the modified plyometrics group after the degradation ($F = 5,449, p < 0,05$). But, it is relatively the same with the pre test so that it can be said that there is no significant improvement on the power of aarm muscle in this group. Meanwhile, the handspring score of this group is experiencing a higher improvement compared to the conventional group although it is not significant, which is ($F = 52,532, p < 0,05$).





EFFECT ON THE PERFORMANCE OF COMPETENCE TEACHER PHYSICAL EDUCATION AND RECREATION HEALTH

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1 . INTRODUCTION

1.1 Background

Quality education is a key condition to realize the life of the nation is advanced , modern and prosperous . Historical development and the development of nations teaches us that a developed nation , modern , and prosperous nations that are having the systems and practices of quality education . Meanwhile , the quality of education depends on the presence of qualified teachers , the teachers are professional , prosperous , and dignified . Problem of teachers is a topic that is not discussed in the inexhaustible variety of seminars , discussions , and workshops for various alternative solutions so that teachers are able to carry out their duties as teachers and educators at the school are optimal . Based on the results of educational research , teacher believed to be one of the dominant factors that determine the success rate of students . Especially in making the improvement of science and technology as well as the ethical and moral internalization . Therefore , it is no exaggeration when people give appreciation to the various issues that arise in the field of education . This is a very critical issue in the context of education in

elementary school education is seen as a reflection of the quality of the future .

Teachers have a very important role in the implementation of the learning process, because teachers are the "key person" who deal directly with students in the teaching and learning activities. Teachers should be able to create a conducive atmosphere so that students are willing to engage fully in the learning activities, so that the learning objectives have been set can be achieved effectively and efficiently.

Teacher performance in teaching and learning to be one of the most important part in supporting the creation of effective educational process, especially in building the discipline. However, when teachers fail to minimize student misbehavior is done, often make teachers become discouraged and lazy in teaching. This is certainly should be avoided by every teacher. For teachers who have high-performance learning stages should be able to prepare students to be able to learn by creating a more conducive learning atmosphere and positive.

Given the important role of teachers in determining the success of the learning, the teachers are required to have a high performance, ie the ability of a set of teachers





in implementing activities related to the teaching and learning process in a professional manner in accordance ethics teaching profession.

As well as a Master of Physical Education Sport and Health are required to perform in line with expectations. Philosophically about Penjasorkes proposed by Corbin, et. all., (1979:1) that, "Being physically educated is an important part of one's total education."

Teacher of Physical Education and Recreation Health as a source of information in the learning process, of course, have the greatest responsibility in an effort to streamline the teaching of physical education. Learning effectiveness of Health Physical Education and Sports is reflected in the involvement of students during and after the study ended. Essence of Sport and Physical Education pembelajaran Good health is a essentially enables students to enjoy the experience and chose to continue his involvement in such activities outside school hours.

Conditions of the poor performance of teachers of Physical Education and Health Sport is becoming a concern that should be addressed in the context of learning , due to lack of discipline and the impact on student learning outcomes . The low performance of teachers of Physical Education and Health Sport has become a major issue in the world congress of Physical Education Sport and Health in Berlin , Germany in 1999 . As

described Lutan (2001 : 14) that , " Physical Education Sport and Health experienced serious threats and pressures with such sign is seen as a field of study that marginalized and unimportant to career " . The low performance of the teacher , based on the results of surveys at the global level is more due to some indications , namely : starting from the allocation of limited time , lack of infrastructure , personnel qualifications are not appropriate , up to a very minimal cost (Lutan , 2001 : 15) . Results of research conducted by Sudjana (2002 : 42) indicates that 76.6 % of student learning outcomes are influenced by the performance of teachers , the details : the ability of teachers to teach to contribute 32.43 % , mastery of subject matter contributed 32.38 % and the attitudes of teachers the subjects contributed 8.60% .

Competence implies that a person's ability to do certain jobs hinted at the world of work and there is official recognition of the capabilities. Based on the Regulation of the Minister of National Education of the Republic of Indonesia Number 16 Year 2007 on Standards of Academic Qualifications and Competencies Teachers, explained that the Teacher Competency Standards developed entirely in 4 main competences, namely: (1) pedagogical, (2) personality, (3) social, and (4) professional. The fourth competency is integrated in teacher performance.

The term competence in the Act No. 14 of 2005 on Teachers and Lecturers interpreted as a set of knowledge , skills , and





behaviors that must be owned , lived , and controlled by the teacher or lecturer professionalism in carrying out the task . Based on the above limitations , it can be concluded that competence refers to : (1) the ability of a person , (2) include knowledge or understanding , skills and attitudes or skills as a totality , (3) emphasis on measurable behavior as the application or transfer of their competence , (4) emphasizes outcomes , (5) competence is used in a particular context that may be different from the one place and the other place . Sudjana (2000 : 36) suggested four competencies of teachers , which has : (1) knowledge about human learning and behavior , (2) knowledge and control of the cultivated fields of study , (3) the right attitude about yourself , school , peers , and cultivated fields of study , and (4) have the skills to teach . While Lavay , French , and Henderson (1997) describes three Penjasorkes professional competence of teachers , which has : (1) knowledge of Penjasorkes and , (2) skills in a variety of sports that will be taught in schools , and (3) have the ability to manage and evaluate student behavior in a positive direction to achieve success in learning .

The results infallible (2009) showed that (1) the relative competence of the teacher education Penjasorkes optimal views of active time and motion study enrollment of students in learning; unfortunately tenure is inversely related to their competence, (2)

professional competence in pre-service as well as in-service is still lacking; (3) personal and social competence of teachers is relatively high, but the longer the period of declining employment personality and social competence, (4) the time for professional development is still relatively low, at between 24-42 minutes per day . Teachers with low tenure tend to use the time for the fulfillment of basic needs.

Teacher of Physical Education and Health Sport has a tough task in learning . Teacher of Physical Education Sport and Health should be able to manage the learning of Physical Education Sport and Health as well as possible . Effective teachers and efficiently meet the following requirements : (1) the teacher is not easily angered , (2) reward teachers for student success , (3) conditioning the teacher to make students behave in a steady , (4) set a time -saving classroom management , (5) regular classroom in an orderly manner ; (6) academic activities ; (7) creative teacher , students must be currently active and creative ; (8) energy saving teachers ; (9) the task of unsupervised students (Agus S SURYOBROTO , 2003:74) . These requirements will be able to help , in regulating the learning of Physical Education and Health Sport in schools , especially primary schools . Learning management Penjasorkes teachers do include organizing infrastructure conditions and organizing human Penjasorkes the students . Teacher of





Physical Education Sport and Health which is able to manage learning effectively and efficiently will be able to achieve the goal Penjasorkes optimally . Penjasorkes teacher should have expertise in many areas that directly or indirectly determine how they perform and how well students are learning each unit of study and teaching materials . Shulman in Metzler (2000:21) recommends seven basic categories of knowledge for teaching , namely : Content knowledge , general pedagogical knowledge , Pedagogical content knowledge , curriculum knowledge , Knowledge of educational contexts , Knowledge of learners and their characteristic , Knowledge of educational goals . Metzler further explained that the seven basic knowledge of teaching is essentially Shulman is still very common . So Metzler (2000:23) shows 11 areas of knowledge -based model of teacher for learning in physical education , namely : (1) learning contexts , (2) learners , (3) learning theories , (4) appropriateness development , (5) learning domains and objectives , (6) physical education content , (7) task analysis and content progression , (8) assessment , (9) social / emotional , (10) equity in the gym , (11) curriculum models for PE . Knowledge - base of knowledge that must be possessed by a teacher of Physical Education and Health Sport will be needed to implement the various approaches and methods of learning , especially learning

models Sport Physical Education and Health are currently being spread .

Studies conducted Heyneman & Loxley in 1983 in 29 countries found that among the various inputs (input) which determines the quality of education (indicated by student achievement) is determined by a third teacher. Increasingly important role of teachers in the midst of limited facilities and infrastructure as experienced by developing countries. The full results of the study are: in 16 developing countries, teachers contribute to student achievement by 34%, while 22% management, 18% of time learning and 26% physical means. In 13 industrialized countries, the contribution of teachers was 36%, 23% management, 22% of time learning and physical means 19% (Supriya, 1999: 178).

1.2 Identification of Problems

Penjasorkes teacher plays an important role and strategic , especially in efforts to form a national character through personality development and the desired values , making it difficult position to be replaced . While saying that his relationship with the infallible teaching , the role of the teacher of Physical Education and Health Sport can not be replaced by other media (2009) . No denying that the teaching profession of Physical Education and Health Sport is currently the expectations of the young generation of Indonesia in order to establish a personal , attitudes , and abilities .





Teacher of Physical Education and Health Sport elementary school has a fairly central role in developing students' character and disposition . This is demonstrated by Suroto et al . that the teaching of physical education is taught about the values of discipline , responsibility , respect for rules , fair play , respect for opponents , and so forth . The International Charter of Physical Education who didklarasikan by UNESCO in 1978 declared that physical education and sport is an activity to actualize human rights in order to develop and maintain physical, mental and moral , therefore everyone should have access to education physical and sports . Physical education and sport can contribute to the control of human values underlying the foundation of the development of every human being fully on . (2009 : 42)

2. DISCUSSION

Studying the behavior of human resources in the organization according to Robibins (2003) cited in Hasbullah (2007:113) can be divided into 3 levels: the level of individuals, groups , and organizations . At the individual level , the study will focus on issues related to : (1) characteristics brought by human resources to the organization , such as perception , personality , and motivation , (2) the things in the organization , which can affect attitudes , perception , motivation , and job satisfaction of the individual , and (3) personality and its implications on the behavior and performasi in the workplace . Level group will discuss

matters related to group dynamics , including , among others : the description of the formation of the group , the processes that occur in groups , group cohesion , competence , and conflict . Whereas the level of organization , more focused on activities on how the influence of organizational size , organizational climate , organizational policies , the level of hierarchy in the organization .

2.1 Teacher Competency

Based on the analysis it was found that teachers' descriptions of Health Physical Education and Recreation at City of Semarang has the ability and height characteristics possessed the knowledge, skills and attitudes in launching the behavior of his duties as a teacher in the form of pedagogic abilities, personality, professional and social good in performing his duties as a teacher.

Health Physical Education teacher competence and Recreation influenced by the guidance system, a means of education and training infrastructures with each system to see the magnitude of the effect of coaching on the competence of 0.354 or 35.4%. The magnitude of the effect of infrastructure conditions on the competence of 0.068 or 6.8%.

A teacher of Physical Education and Recreation Health should have the basic skills and general organizer that includes mastery of the material to be taught and mastery seta assessment delivery methods .





In detail the characteristics that should be possessed of Health and Physical Education teacher Recreation is having the ability to identify the characteristics of the child 's physical growth , mental development , social and emotional development in accordance with the phases of growth . Teacher of Physical Education and Recreation Health should be able to generate and give children the opportunity to create on and active in the learning process of physical education , and be able to develop the potential abilities and motor skills of children. Able to provide guidance and development of children in the learning process to achieve the goal of physical education . Can plan , execute , control and evaluate and correct the fields of study in the learning process of physical education in schools . Penjas teachers must understand and master the fine motor skills . Elements capable of physical condition . Having the ability to create , develop , and utilize environmental factors that exist in achieving educational goals jasmani. Memiliki ability to identify potential learners in the sport and hobby of learners in the world of sports .

Standardization of teacher competence consists of four components, namely: Competence personality, competence paedagogie, professional competence, and social competence according to Law Teachers and Lecturers No. 14/2005 and Government Regulation No.

19/2005. Fourth Competence can be described by the following indicators:

1) pedagogical competence is the ability of teachers to manage student learning . This competency is measured by the proportion of study time allocation motion (active time allotment) and the proportion of the number of students in a learning activity motion

2) Professional competence is the ability of teachers in the mastery of subject matter is broad and deep . This competency is measured by using a questionnaire that contains : (1) the profile of activities that include teachers teaching load , extracurricular load , sports organizations , training , and educational history , (2) the professional component includes the knowledge , skills , and attitudes in pre - service training and in- service training , and orientation of common values that teachers in developing teaching and learning of physical education

3) Competence personality is the ability of a solid personality, noble, wise, and dignified and exemplary learners.

4) Social competence is the ability of teachers to communicate and interact effectively and efficiently with students , fellow teachers , parents / guardians of students , and the surrounding communities

2.2 Teacher Performance

Based on the descriptive statistical analysis found that 58.1% performance of primary school teacher education jasmanai





Semarang city has a very high performance in carrying out his duties as an educator, has a good personality, have a professional attitude, and social good. However there is a small part of physical education teachers who have sufficient performance because it is not good competence and facility infrastructures are still not good.

Teacher performance is very important to note and evaluated for teacher professional task, meaning that tasks can only be done with special competencies acquired through education programs. According Danim S teachers have responsibilities can be broadly grouped as follows:

- (1) the teacher as the teacher
- (2) teachers as mentors and
- (3) the teacher as class administrator

Performance (performance) a person in an organization is influenced by several factors. Satisfaction factor is one of the determinants of a person's performance. Job satisfaction is an emotional state experienced by teachers as it relates to the duties and obligations as educators in schools / educational institutions (Hoy & Miskel 1991). Individual's performance can also be influenced by the organizational culture and organizational leadership (Lako, A.2004 : 70). Furthermore Lako (2004:72-73) suggests that organizational culture and leadership as predictor variables that determine the

implementation efektifitas BSC (Balance Score Card).

According to Yamin Marno (2010:22), effective teachers are able to perform the duties and functions in a professional manner. To be able to perform duties in a professional manner, required sharing requirements such as academic competence, methodological competence, personal maturity, dedicated attitude, adequate welfare, career development, work culture, and a conducive working atmosphere.

According to Law No. 14 of 2005 the law faculty of teachers, competence is a set of knowledge, skills, and behaviors that must be owned, lived, and controlled by the teacher or lecturer professionalism in carrying out the task, while the teacher competency determination can be interpreted as knowledge, skills and attitudes which berwujudkan with intelligent action and full responsibility in carrying out the task of a learning agent. Teacher competence can be influenced by several factors such as:

- (1) System Development,
- (2) Infrastructure condition, and
- (3) Education Training.

Performance standard terms are: (1) relevant to an individual or organization, (2) is stable and reliable, (3) be able to distinguish between the execution of the work is good, average and poor, expressed in numbers, easily measured, and can be understood by the employee or supervisors and (4) provide unambiguous interpretation (Simamora,





1999:16). According Prawirosentono (1999), performance (Performance) is the result of work that can be achieved by a person or group of people within the organization, in accordance with the authority and responsibilities of each in the context of efforts to achieve the goals of the organization in question legally, do not violate the law and in accordance with morals and ethics.

Performance can also be interpreted as a result of the quality and quantity of work achieved by an employee in carrying out their duties in accordance with the responsibilities assigned to him. Besides influenced by Systems Development, Infrastructure Condition and Exercise Education, penjas teacher performance is also influenced by the competence of teachers. In general, there are several factors that teacher performance. Such factors include: System Development, Infrastructure Conditions, Education Training and Competence to teacher performance.

Teacher competence is the ability or the ability of teachers to manage learning. Tekannya point is the ability of the teacher in teaching is not what is to be learned (learning what to be learned), teachers are required to create and use a positive state to bring them into the learning so that children can develop competencies (Hizbullah, 2005). According to Marshal, P. (2003:39-40) in the book "people and competencies" Competence is a basic characteristic of a person that enables it provides superior

performance in a job, role or situation. Models tip of the iceberg, as directed in the different competency levels, namely: skills, knowledge, social roles, self-image, character and motives.

Based on 2004 data from the Ministry of Education that there has been a shortage of elementary school teachers Penjasorkes as many as 60 648 people. This condition is addressed by providing education and training for six months in the eye Penjasorkes for elementary school teaching to teachers of religion in primary schools. This training is for schools that do not have teachers Penjasorkes. With arguments rather than learning Penjasorkes not delivered, the better religious teachers are empowered to teach Penjasorkes. Although it is common sense can not be accepted, but such a move could be a solution shortly before the appointment of the teachers Penjasorkes truly qualified in their fields of expertise. So expect performance Penjasorkes future teachers will be more professional in their duties at school.

There are several reasons why the "standard of competence" was chosen as a reference for the development of human resources

First : The speed of change and technological advances applied diindustri requires human resources that have the adaptability and competitiveness are flexible to deal with it .
Second: High demand and global competition in education, especially the educators to plan





strategies that have an impact on the demand and the need for a flexible adjustment. Formation that needs no adjustment in the education office will affect penjas teacher needs to be filled.

Third: With the demands that are likely to change the form of organization, human resource development, which refers to a fixed standard office / raw, will quickly fall behind, it is necessary to look for other models are more efficient approach.

Fourth: It has been introduced and wore the standard model by the International Labour Competence Organization (ILO) in several Asia-Pacific countries that declared "compatible" in International.

Fifth : The desire " stakeholder " or the interest of the various parties , both government and private , to have a container or body that formulates national policy direction in the development of human resources , which are currently underway in the process of its formation . One of the thoughts that have been formulated in the standard model is used to benchmark the development of HR competencies .

Increased physical education teacher competence can be implemented by making one of the supporting organizations to establish Centre for Development and Empowerment of Educators Pernjasorkes (P5) organization of Organization and Work Centre for Development and Empowerment of Educators Penjasorkes. As a key staple in the professional development of teachers of

physical education. In performing its duties, P5 the following functions:

- 1) Preparation of program development and empowerment of teachers and elementary school physical education.
- 2) an increase in data and information management competencies of teachers and elementary school physical education.
- 3) Facilitation and implementation of the increasing competence of teachers and elementary school physical education.
- 4) The implementation of the cooperation in the field of development and empowerment of teachers and education personnel;
- 5) Evaluation of programs and facilitation of increased competence of teachers and elementary school physical education.
- (6) Implementation of administrative affairs Educator Development and Empowerment Center Penjasorkes (P5).

3. CONCLUSION

Ability of teachers to organize teaching and learning is one of the main requirements of a teacher in seeking better results than teaching undertaken. Teachers will be able to carry out professional duties properly and can act as an effective teaching force if it has met the competencies that should be possessed by a teacher. As stated in article 8, paragraph 3, that the teacher as an agent of learning in elementary and secondary education and early childhood





education include: (1) paedagogie competence, (2) personal competence, (3) professional competence and (4) social competence .

The fourth teacher competence is absolutely necessary in carrying out their duties and obligations as educators, teachers, and mentors. For when teachers are competent, then he will be able to make students intelligent, independent, and good quality for the development of the nation as well as individual development of the student.

References

- Arikunto, Suharimi 1995. *Prosedur Penelitian suatu Pendekatan Praktis*. Jakarta: Rineka Cipta.
- Anik Gufron. (1998). *Kemampuan Guru SD Melakukan Kegiatan Inovasi untuk Meningkatkan Mutu Pembelajaran*. Yogyakarta: IKIP Yogyakarta.
- Bafadal, Ibrahim. 2004. *Seri Manajemen Peningkatan Mutu Pendidikan Berbasis Sekolah. Peningkatan Profesionalisme Guru Sekolah Dasar (Dalam Kerangka Manajemen Peningkatan Mutu Berbasis Sekolah)*. Cetakan Kedua. Jakarta: PT. Bumi Aksara.
- Bambang Sudibyo. 2009. *Education Management*. Jakarta: Rajawali Press.
- Bucher, Charles a. 1967. *Administration of School and College Health Physical*. PT. Cipta Jakarta.
- Buckley, Jack, et al. 2004. *The Effects of School Facility Quality on Teacher Retention in Urban School Districts*. Washington D. C.
- Corbin, C. B. (1995). *The field of physical education: Common goals, not common roles*. *Journal of Physical Education, Recreation, & Dance*, 66(1), 84-87
- Cholik Mutohir, 1986, *The Development and examination of Student Evaluasi Teaching Effectiveness in an Indonesian Education Setting., A Thesis Submitted to Marcuarie University in Partial Fulfilment of the Degree of Doctor of Philosopy in the School of Education*. Marcuarie University, Sydney.
- Lako, Andreas. 2004. *Kepemimpinan dan Kinerja Organisasi, Isu, Teori dan Solusi*. Yogyakarta: Penerbit Amara Book.
- Metzler, Michael W. (2000). *Instructional Models for Physical Education*. Massachusetts: Allyn And Bacon, A Person Education Company.

