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"Strengthening the Ties Between Education and Research"

May 16 -17, 2013  
UNY Hotel  
Yogyakarta State University



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PROCEEDINGS  
INTERNATIONAL CONFERENCE ON EDUCATIONAL  
2013  
BRIDGING THE GAP BETWEEN APPLICATION AND RESEARCH

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Editor :  
Bambang Sugeng, Ph.D  
Sumarno, Ph.D  
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# The Development of The Assessment System of Learning Result in Physical Education and Sport Health for High School in Yogyakarta Special Region

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## Abstrak

The aims of the research are as follow (1) to know the characteristics of the assessment instrument of learning result in physical education and sport health for high school especially for the volleyball game material, (2) to construct the assessment procedures, (3) to know the profile of the student's ability in practicing volleyball game.

The kind of the research is development research. The model of development research is educational research that was developed by Borg and Gall. The procedures of educational research are : (a) the initial research phase, (b) the developmental phase, (c) field testing phase, and (d) dissemination phase.

The samples as the test subjects are the students of sport laboratory school for volleyball in Sport Science Faculty, Yogyakarta State University. The raters for practicing volleyball are the teachers. The subjects of the research are the students of five high schools in Yogyakarta Special Region. They are SMAN 1 Yogyakarta, SMAN 2 Wates, SMAN 1 Seyegan, SMAN 1 Sewon, and SMAN 1 Tanjung Sari. The sampling technique uses purposive sampling. The competence that is based on the Minimum Mastery Criterion (MMC) and the agreement with the school is  $\geq 70$ .

The results of the research are (1) the form of learning result instruments for physical education and sport health materials on volleyball include, the task sheets for the competence test, the scoring sheets, the assessment guidance for rubrics (criteria) equipped with checklists and the assessment procedures for practicing volleyball (2) the assessment instruments use the content validity in the good category according to the experts judgments (3) The reliability of the assessment instruments use the Genova program with the coefficient 0.82, and Cohen's Kappa with the coefficient 0.79, both fulfill the qualified reliability (4) The assessment procedures in practicing volleyball include the skill for playing preparation, the skill of playing technique, the skill of ball placing, and the student's attitude during the game. (5) The profile of competence shows that 93% of the students are competent and 7% of the students are incompetent; (6) Based on the opinions of physical education and sport health teachers, the assessment instruments for volleyball can be used easily.

**Keywords:** the assessment system of learning result, volleyball



able to measure the level of student's ability in volleyball game material. The research is based on the assumption that the understanding of teachers to the nature of Physical Education and Sport Health especially in the implementation of learning for game material is not as expected so they guide imprecisely by subjective assessment. Because of the teacher's disability to assess the learning result of the students, subjectivity in Physical Education and Sport Health assessment is an inevitable problem. Basically, subjectivity in assessment as the student's learning result due to the difficulty in determining the assessment criteria.

Teachers must have the ability to arrange the assessment process such as the item for skill practice, rubrics, assessment instrument and procedures. In conducting the assessment process, many teachers have not used the proper procedures of assessment. In fact, the assessment procedures that have been developed are unsystematic. Because of the teacher's disability to construct the valid and reliable assessment procedures and the absence of the raters, subjectivity will dominate the decision in assessment.

The assessment of student learning result in physical education and sport health, especially in volleyball game material must notice to some aspects. They are the process and the product. These aspects will describe the real student's capability in practicing volleyball. In the assessment of process, the teacher will observe the student's activities in the preparation stages in volleyball such as the technique to start the game and the technique of body movement to play with the ball. In the product assessment, the teacher will observe the result of ball placement after a series of playing the ball in volleyball.

In reality the process and the product assessment is based on the teacher's knowledge in volleyball. In gaining the product assessment, the teachers will measure the motor skill with the sport skills test. Sport skills test is a test which resembles its sport situation. The accuracy test such as throwing, hitting, or kicking an object to a target for accuracy are included in sport skill test. Free throw in basketball, low serve in badminton, and serve in volleyball are the kinds of accuracy test that are commonly used by the teachers for assessment. These method will eliminate the process of assessment.

The use of sports skills test is an invalid predictor to measure the student's ability in the real play because the student's skill is inconsistent, and the skills that are usually tested on the students are out of context (Veal, 1992:88-96). The problem is that such tests can not be used as reference to estimate the student's performance. The test results will not reflect the student's performance in the real/ authentic game so that the teachers will find difficulty in gaining the assessment of process and product. From the initial study, the problem of the assessment in learning result are (1) the factor of subjectivity in assessment (2) the finding of criteria in the assessment of process and product (3) the separated assessment for each indicator, (4) the absence of suitable assessment guidelines with the student's development.



It is important to solve the problem of assessment in physical education and sport health especially in volleyball.

The initial study on the teacher's disability to decide the criteria for assessment become the foundation of the research. Until now Penjasorkes learning outcomes assessment instruments that have been scientifically tested that can be used by teachers Penjasorkes, especially in Indonesia, are not yet available. During this time, teachers use assessment instruments Penjasorkes compiled independently by adopting an instrument that does not conform to the characteristics of the students. As a result, the perception differences arising on learning outcomes assessment instruments Penjasorkes between one and the other teachers. In an effort to measure student learning outcomes in physical education includes properties in the cognitive, affective and psychomotor performance can be done through work or tasks that make up the competency. To determine the competence of individual learners through examinations conducted a competency test. One assessment to measure student competency in the context of real life through the performance of tasks in accordance with the characteristics of penjas is authentic asesement (Mustain, 1995:19). Authentic assessment is designed to engage students in the critical tasks that best represents the real-life experiences (Bruder, 1993).

Based on the background above, it is necessary the development of structured learning outcomes assessment system by using one of the alternative assessment using authentic assessment as a system that produces guidelines for the development of students' performance assessment instruments, procedures for using these instruments and the manner of reporting results judgment. Development assessment system is useful for teachers he hoped to be able to carry out the assessment process to gather information on the achievement of student competence level, high school volleyball game material so that optimally useful to improve the quality of teaching physical education at the high school level.

**B. Problem Formulation The issues in this study is formulated as follows:**

1. How do the components of learning outcomes assessment instruments Penjasorkes subjects, particularly on the material in high school volleyball game DIY?
2. How do the characteristics of learning outcomes assessment instruments Penjasorkes subjects, especially in the volleyball game materials that include high reliability and validity in DIY?
3. What is the procedure of learning outcomes assessment implementation Penjasorkes subject to the material in high school volleyball game DIY?
4. How is the profile result Penjasorkes study subjects in high school volleyball game material DIY?

### **C. Product specifications are expected**

Development of student learning outcomes assessment system Penjasorkes high school in this study to produce a product in the form of assessment instruments kids play high school volleyball is valid and reliable. Expected product specifications are as follows: (1) about the game of volleyball practice competency test, the items because according to the standards of competence penjasorekes high school subjects, (2) assessment sheets volleyball game, (3) assessment rubrics or guides volleyball games, (4) assessment procedures Penjasorkes play volleyball in high school subjects. The assessment instrument is needed to assist teachers in providing an objective assessment of the ability of students playing volleyball game. Objective assessment will help teachers identify students' ability to practice volleyball game on Penjasorkes subjects in high school Yogyakarta.

### **D. Theoretical grounding**

#### **1. Competency-Based High School Curriculum.**

The curriculum is a very important tool in educational achievement, meaning that without a good and appropriate curriculum will be difficult to achieve educational goals and objectives aspired. According to the Law of the Republic of Indonesia Number 20 Year 2003 on National Education System and the Indonesian Government Regulation No. 19 Year 2005 on National Education Standards mandates that: "Education Unit Level Curriculum (SBC) elementary and secondary education prepared by the educational unit with reference to the Content Standards (SI) and the Competency Standards (SKL) and based on the guidelines developed by the National Education Standards Agency (BSNP)".

In order to fulfill the mandate of the law and in order to achieve the objectives of national education in general and schools in particular educational goals, SMA / MA as a mid-level educational institution deems it necessary to develop the Education Unit Level Curriculum (SBC). Taconis (2004:65) stresses that the competency-based curriculum should address the knowledge, skills and attitudes in an integrated manner, because each one separately is not enough to say competent professional behavior.

Gillis (2007:20) states that how competence should be assessed and other problems associated with the reporting of assessment. Directly observable behavior and behavioral indicators can be determined according to the number of competencies required to indicate the quality of performance on each task.

Competency-based curriculum has five characteristics, namely: (1) emphasis on the achievement of student competencies, both individually and classical, (2) results-oriented learning and diversity, (3) delivery of learning using a variety of approaches and methods, (4) learning resources not only teachers, but also other learning resources that meet the



elements of education, (5) assessment emphasizes the process and results in an effort to control or achievement of competence (Ministry of Education, 2002: 23).

Application of SBC still oriented on pencapaian learning outcomes (output-oriented) are formulated in the form of competence means learning is considered successful when the student has achieved a minimum standard of competence specified. SBC-based learning can be defined as a process of applying ideas, concepts and SBC policies in a learning activity so that students master a particular set of competencies as a result of interaction with the environment (Mulyasa, 2006: 66). In the learning process based on competency standards, achievement kriteria minimal at every stage of learning is necessary, because it serves as a benchmark or minimum criteria that must be met by students after undergoing the learning process (H. Bahrul, 2004).

Competency is defined as the knowledge, skills, and values reflected in the basic habits of thinking and acting (Depdinas, 2003). Competency standards are the limits and direction capabilities that must be owned and learners can be done after following the process of learning a particular subject (Djemari M., 2004). Through CBC, standard and basic competencies to be mastered by the student at any level of schooling and the necessary assessment using appropriate assessment instruments.

## **2. Competency-Based Assessment.**

Jennifer L Fiset et al, (2009: 34) states the importance of assessment as follows: In an era when accountability matters, assessment is imperative. Assessment needs to be an integral part of the instructional process (formative assessment) to provide teachers and students with ongoing information about what they are learning. Assessment also needs to be used to Determine what students have learned at the end of instruction (summative assessment). Teachers, students, parents, administrators, and policy makers need to understand what students know and are able to do as a result of their education program That is, in an era when things accountability, assessment is very important.

Assessment should be an integral part of the learning process (formative assessment) to provide teachers and students with ongoing information about what they are learning. Assessment is an integral part of teaching and learning (John Mueller, 2006: 1). Assessment should also be used to determine what students have learned at the end of instruction (summative assessment). Teachers, students, parents, administrators, and policy makers need to understand what students know and can do as a result of the physical education program students.

Competency-based assessment is a means used by teachers to evaluate student performance, for the purpose of placement and professional development planning (Yorkovich, 2008:1). Emphasis is competency-based assessment activities assess a person's



ability or success criteria, instead of comparing the ability of someone to others in the class (Yoyoh Jubaedah, 2007:9). Competence is the ability of the form of knowledge, skills, attitudes and values are reflected in the habit of acting and thinking after students complete an aspect or sub-aspect of a particular subject (Ministry of Education, 2003: 5).

A competency-based assessment instrument that provides a way to define and measure job skills and performance abilities. Various other concepts associated with competency-based assessment such as motivation, nature, self-concept, attitudes, cognitive behavioral, skills, and work habits (Schippman et al, 200: 706). Alison Wolf (2001: 2) stated that competency-based assessment is as follows: Competence-based assessment is a form of assessment that is derived from a specification of a set of outcomes; Clearly states so that the outcomes-both general and specific-that assessors, students and interested third parties can all the make reasonably objective judgments with respect to student achievement or non-achievement of these outcomes; and that certifies student progress on the basis of Demonstrated achievement of these outcomes. According Yorkovich (2008:2), the assumption of competency-based assessment system are: (1) describe the characteristics of a person's behavior effectively, (2) does not depend on the judgment of others, but based on a person's behavior, (3) helped produce the most effective way of neighbor behavior; (4) rating system used is based on competency standards.

### **3. Learning Outcomes Assessment System**

The approach used in the development and implementation of the curriculum is very influential on the scoring system implemented. Developed curriculum and delivery of learning in high school with a competency-based approach, the results of the assessment system used competency-based learning, known as the Competency Based Assessment (CBA). Competency-based assessment is the assessment of evidence to determine when a person's ability to set standards of competence (Hayton and Wagner, 1998: 7). Based on the national education system adheres to clarify learning goals Bloom's taxonomy of learning objectives. According to Bloom (Orlich, et al, 2007: 67 - 69), most fit into three broad objectives instructional areas: the cognitive, affective, and psychomotor domains. It means that the purpose of education is divided into three domains, namely: (a) cognitive domains (cognitive domain), which contains the behaviors that emphasize the intellectual aspects, such as knowledge, understanding, and thinking skills, (b) affective domain (affective domain) contains behaviors that emphasize aspects of feelings and emotions, such as interests, attitudes, appreciation, and the manner of adjustment; (c) psychomotoric domains (psychomotor domain) contains the behaviors that emphasize aspects of motor skills such as handwriting, typing, swimming, and operate machine. Cognitive, affective, and psychomotor treated as a unified underlying behavior of a competency. The important role of learning

outcomes assessment is to determine student learning capian (Jennifer L Fisetete at.al, 2009: 33).

Els van der Werf (2006: 17) stated learning outcomes are as follows: Learning outcomes are statements of what a learner is expected to know, understand and / or be Able to Demonstrate at the end of a period of learning. They make explicit the results of learning and are usually defined in terms of a mixture of knowledge, skills, abilities, attitudes and understanding.

It means that the actual concept of learning outcomes and the ability to be thorough about dilihasilkan students pass the test subjects, as well as affective and psychomotor learning outcomes that are integrated throughout the domain associated with the development of the students themselves. Student learning outcomes assessment SMA is a systematic process for gathering information such as numbers, verbal descriptions, to make a decision on the achievement of learning outcomes or competence of learners. Teachers strive to continue to monitor the process, progress, and continuous improvement of the results in the form of daily tests, midterm replay, and replay the end of the semester.

The scoring system is as a reference the principles, methods of testing, and the rules implementing assessment / certification testing needed for the assessment / testing can be guaranteed based competency standards, implemented in a fair, valid, and consistent. Development of performance appraisal system plays volleyball game includes three domains, namely: cognitive, affective, and psychomotor domains. At the high school level, many subjects related to psychomotor domains are physical education and sports health. In other words, learning activities that are associated with the psychomotor domain is the practice field. Penjasorkes is the only subject in school that uses motion as a medium of learning to achieve educational goals. Wuest and Bucher (1995: 97) states, "Movement is the Keystone of Physical Education and Sport." It is clear to say that the motion is key to physical education and sport. According Rusli Lutan (2002: :15) the process of learning to move and learning through movement are two meanings that should be held in Penjasorkes. Expected taught physical education learning various fundamental movement skills, techniques and strategies of the game / olahraga, internalization (sportsmanship, teamwork) (Asmawi, 2006: 134). Through a movement led students to find out how. The movement, the movement and the usefulness know also able to demonstrate positive behaviors for learning (teamwork, discipline, sharing space and equipment, and other honest) that students are expected to also manifested in his daily life. However, in the development of competency assessment system test playing volleyball game, psychomotor domain is the most dominant.

Performance appraisal or often referred to as authentic assessment (assessment authentic) (Metzler, 2005: 178). Authentic assessment or authentic assessment in other books (except Wiggins) authentic assessment be made equal to the name of an alternative



assessment (alternative assessment) or the assessment of performance (performance assessment) (Herman, Aschbacher, and Winter, 1992). According to John Mueller (2006: 157) Authentic assessment is an assessment form which the students were asked to show the real situation with the task of demonstrating the application of skills and knowledge essential significance (direct assessment). Authentic assessments are designed to take place in a real-life setting rather than in an artificial or contrived setting, roomates typifies traditional forms of assessment. They can be made on either an individual or group basis, and may involve; a significant degree of student choice (NSPE in Baker, O'Neill, & Linn, 1993).

Authentic assessment is an attempt to challenge the depiction and performance standards that students will encounter in the real world (Wiggins, 1989a, b). To be assessed to ensure that it really is a real individual competencies (the learner), then the assessment should be done in an authentic (real, real as everyday life) and in accordance with their lessons, so that authentic assessment takes place in an integrated manner with the learning process. That is, students are engaged in meaningful tasks that significantly influence their performance compared to memorize facts that have no value in the future.

Authentic assessment is recognized as another way to assess student learning and improve teaching physical education (Hensley, 1997: 19-24). Authentic assessment also means emphasizing the responsibility of teachers and students to know and understanding of physical education (Lund, 2002:7). It means authentic assessment is one way to emphasize student responsibility in knowing how the parts and keys corresponding to the subject matter and demonstrate skill or competence. Students must be able to integrate the skills into game shape and the actual exercise to demonstrate mastery (Lund, 2002: 42).

Further Veal (1992:90) describes authentic assessment in physical education is ongoing or continuous, therefore the assessment should be done in person at the time of the learning process takes place, which can be monitored processes and products not only assess student learning at the end of the unit so that authentic assessment can occur throughout the unit. From the description above it can be concluded opinion Authentic assessment is an assessment form which the students were asked to display the tasks in real situations that demonstrate the application of skills and knowledge essential that meaningful.

#### **Test characteristics**

One of the principles of competency-based assessment is a measuring instrument must be valid and reliable, especially for the assessment of the test form. If the test is used in large-scale and fundamental decisions and broad impact, valid and reliable requirements should be accompanied with statistical validity. Tests that produce data that is not relevant to the



purpose of measurement is said to be a test that has low validity (Azwar, 2007:43). Content validity refers to the contents of the test as a representative sample and measured the ability of a given subject matter. Validity relates to suitability, usability and meaningfulness. Form of validation of the validity of the content tailored to the specifications table that already exists, in the form of teaching content and skills measured. According to Azwar (2007:45-48) suggests that content validity was estimated by testing the validity of the content of the test with a rational analysis of professional judgment. In general, the test can be said to be good if it is a valid measure, meaning that it is capable of measuring instruments fulfill its function as a test or in other words, the test is able to measure what should be measured. Djemari Mardapi (2004:14) argues that the validity of the measuring instrument can be seen from the construct measuring instruments, which measure as planned. Through the lattice gauge will know the validity of a measuring instrument. Lattice contains material tested, forms of matter, the level of the multilevel thinking, weight about, and how pensekoran. According to Allen & Yen (1979: 95).

A test is said to be valid if it measures what it is supposed to be measured. Messick (1989: 13) states that the validity of an overall assessment of the empirical evidence and logic that supports the theory of decision-making and actions based on test scores or assessment models other. The validity of the test is divided into three types: content validity (content validity), criterion validity based (criterion-related validity), and construct validity (construct validity) (Anwar, 2007: 45). While Crocker and Algina (1986:105) argues that the tests were tested on the same individual at different times it will produce the same value.

In addition to the validity of the indispensable requirements on a test, it is necessary also information about reliability. Popham (1995:21) states that reliability relates to the consistency of measurement results. Factors affecting the reliability associated with the test are: (1) many grains, (2) the homogeneity of the test material, (3) the homogeneity of grain characteristics, and (4) variability scores. Reliability associated with learners is influenced by factors: (1) the heterogeneity of the group, (2) the experience of students take the test, and (3) motivation of learners (Ebel, 1991: 88-93). Thus, measuring tools said to be reliable (consistent / fixed) when the measurement results show the extent to deliver results relatively different when measured back to the same subject. According to Crocker and Algina (1986:105) that the tests were tested on the same individual at different times it will produce the same value. Based on the opinion of Johnson (2009:22):

The consistency of examinees' scores across occasions such as Facets, tasks, and raters. In other words, reliability addresses Whether an examinee's score would be the same if she were to take the exam on a different occasion, complete different tasks, or be scored by different raters. Reliability with respect to the consistency between assessors will get the same score. By reliability, we mean consistent in assessing the exam. Reliability is the value of a test will be the same when assessed on different occasions in completing the tasks are

assessed by different assessors. (Johnson, 2009:22-23). Subsequently Smith (2007:2) states that the test performance, so that meaningful and consistent assessment system that can be used inter-rater reliability. Judging from the way of making and interpretation of test scores, the test can be divided into a test and a reference based on norm reference benchmark. Both of these references using different assumptions about the ability of a person. Norm reference tests assume that people of different abilities and can be described by a normal distribution. Compared with the results of one test group. If the test scores are interpreted based on certain criteria, then use the reference criterion. The main characteristic that marks the use of assessment is the benchmark reference for the interpretation of scores from the measurement tool that can generate a description of the skills or knowledge being owned by learners. Interpretation of test results are always compared to the standard or criteria set in advance (Djemari Mardapi, 2004: 13). Selection of proper reference is determined by the characteristics of the subject areas to be measured and the objectives to be achieved. Reference measurement norm aims to measure individual competence in general, the results in the form of information about the level of achievement in some subpokok discussion on a field of study. In reference measurement norms, individual differences is preferred so that the preparation of items mmapu reveals high variability. In the reference measurement criteria, individual differences is not an important thing, but more important criteria, mastery or non-mastery.

#### **4. Physical Education, Sport and Health**

##### **a. Understanding Penjasorkes**

Physical education, which is called the curriculum in parallel with the other terms being of Physical Education, Sport and Health, is one of the subjects presented in schools, ranging from elementary to high school. Physical education is an integral part of education as a whole, aims to develop the aspect of physical fitness, motor skills, critical thinking skills, social skills, reasoning, emotional stability, moral action, a healthy lifestyle and clean environment through the introduction of physical activity that is planned systematically selected in order to achieve educational goals (Ali Maksum, 2008:7).

According to Nixon and Jewett (1983: 27) physical education is one aspect of the overall educational process with respect to the development and use of voluntary individual motion capabilities and useful as well as directly related to the response of mental, emotional and social. According to Pettifor (1999:134) provide physical education students to practice active and healthy life by providing coverage of learning experiences are neat and systematic. He asserts that the experience should be able to improve the mastery of motor skills development, fitness and health based on the knowledge, confidence in being active and can appreciate the advantage of physical activity. In other words, physical education



equip learners space to form a solid basis entirely (whole child) that is directed at development aspects of cognitive, affective and psychomotor.

This concurs with the overall concept Deur (1995:156) argues that physical education is part of a comprehensive educational program to contribute to the overall growth and development of students through movement experiences. This opinion is consistent with the fact that physical education is a learning process that aims to build specific knowledge, capability and understanding and promoting physical fitness. (Capel, 2000: 73). Nevertheless, the focus is on the learner and the development of physical prowess rather than on physical activity.

Penjasorkes is essentially a process of education that utilize physical activity to produce a holistic change in the quality of the individual, both in terms of physical, mental, and emotional. Physical education to treat the child as a unified whole, being a total, rather than just take it as a separate one's physical and mental quality (Mahendra, 2007).

In fact, Penjasorkes is a really broad field of study. The point of concern is the increase in human motion. More specifically, Penjasorkes deals with the relationship between human movement and other educational areas: the relationship of the development of the physical body with the mind and soul. The focus on the influence of physical development to growth areas and other aspects of human development is what makes it unique. There is no other single area such Penjasorkes concerned with the total development of the human being.

Penjasorkes led to improvements in 'mind and body' that affects all aspects of a person's daily life. Holistic mind-body approach includes also an emphasis on the three educational domains: psychomotor, cognitive, and affective. As expressions of Robert Gensemer, Penjasorkes termed as the process of creating "a place that is good for the body mind or soul." Means, in good body 'expected' there is also a healthy soul, in line with the ancient Roman proverb: "Men there in corporesano". Based on the foregoing, Penjasorkes as an integral part of education as a whole has a role as a foundation for the development of the child. Thus, physical education can develop the full potential of organic aspect of the child, perceptual, cognitive, social and emotional.

#### **b. Understanding volleyball game**

In the course of physical exercise and health education in secondary schools using a volleyball game as one of the learning material motion. American Sport Education Program (2007:22) states volleyball games are as follows:

Volleyball is unique in that it is a game of errors where the objective is to get the ball to hit the floor on the opponent's side of the net or force the opponent to make-ballhandling error. Thus, the majority of points scored in volleyball are result of an error.



Concepts and principles according Yuyun volleyball and Toto (2010:36) "game of volleyball at the beginning of the idea is bouncing a ball game (to-volley) by the hand or arm of the two teams that played her field bag that has certain sizes. For each team, the field was divided by two equally large net or rope laid on the field at the same two large by net or rope stretched across the field to the size of a certain height. One of those players should not be bouncing the ball twice in a row unless the hedge, and Satui team can play a maximum of three times the ball touches the ground itself.

The principle of playing volleyball is played with a ball memvoli (hitting with the hand) and tried to drop it into the opponent's ground game with ball menyebrangkan through the net or nets, and keep it so that the ball does not fall on the ground itself. While the principle of playing volleyball, according Yuyun and Toto (2010:36) "the principle of playing volleyball is to keep the ball not to fall in the field itself and trying to drop the ball on the ground servicing of service area" pertaturan basis used is the ball should bounce off the hands, arms, or the front of the body and limbs. The ball must disebarangkan opponent to the ground through the net. Learning basic volleyball game can aim for pleasure (Joel, 2003: vii). Furthermore, according to Joel volleyball is a unique, exciting game that requires solid teamwork and consistent execution of individual (2003: vii). Volleyball uniqueness unlike any other sport because of the play in addition to the element of teamwork that without the cooperation of the team will not be able to attack with the right (Kinda S, 2006: v). Volleyball as a team sport has unique characteristics which make use of the field measuring 18 x 9 m, the barrier net and the team in the form of basic rules (Joel, 2003: vii).

Volleyball game according to the types of classifications permainanannya including the types of net games (Hopper, 1998:15). This primary rule leads to progressive principles of play that are consistency, then placement of the object and positioning in relation to opponent's targeted area, and finally spin and power to make it difficult for an opponent to get the object back into play (Hopper, 1998 : 16). In this game deals with some of the things that did rally in consistency, placement of the ball on target an opponent or opponent's area, and the skills to hit the ball with the technique chosen for the deadly opponent.

According to Crum (2006:8) is rallying versus playing to the ground, to hit (or touch) somebody's field (or the field of the other teams) with an object (for example a ball) with respect to Prevent or to hit that (or touch) somebody's field (or the other of the team) that way the other person (or team) can not return the object (in my our field). Means to repeatedly hit or touch your opponent or object field to the other side of the field as well as preventing attacks opponents punch or touch objects to the field itself. Rally is take across the net ball game between two teams with opposing berahkir scoring or moving the ball (Barbara L. Viera, 2004:4). From the above it can be concluded that the opinion of the game volleyball is a game whose activities seek to return the ball to each other by entering the

opponent's area ball passes over the net with a goal for the opposing force is not able to return the ball so that the printed score / point.

#### **E. Research Methods**

This type of research is the development of research. Development research model chosen is the research and development of educational models developed by Borg and Gall, the procedure: through four phases: a preliminary study, the development stage, trial phase, and dissemination phases. Determination construct instruments volleyball game that consists of current assessment instruments *persiapan* will play ball, play ball appraisal process technique, ball placement outcomes assessment, and assessment of the value contained when play is done through physical education expert opinion, expert volleyball game, measurement experts, and *Penjasorkes* teacher.

The study subjects consisted of two elements, namely educators and high school students in the five districts in the province include SMAN 1 Yogyakarta, Wates SMAN 2, SMAN 1 Seyegan, SMAN 1 Sewon, SMAN 1 Tanjung Sari. Determination of the coefficient of reliability assessment instruments performed using the program package *genova* based on generalizability theory developed by Cric and L.Brennan consisting of theory G (Generalized study) and D (Decision study) component of variance is a person, rater, item, person interaction and rater, and error, and the interrater Cohen's Kappa coefficient.

#### **F. Conclusion**

The results of the research are (1) the form of learning result instruments for physical education and sport health materials on volleyball include, the task sheets for the competence test, the scoring sheets, the assessment guidance for rubrics (criteria) equipped with checklists and the assessment procedures for practicing volleyball (2) the assessment instruments use the content validity in the good category according to the experts judgments (3) The reliability of the assessment instruments use the *Genova* program with the coefficient 0.82, and Cohen's Kappa with the coefficient 0.79, both fulfill the qualified reliability (4) The assessment procedures in practicing volleyball include the skill for playing preparation, the skill of playing technique, the skill of ball placing, and the student's attitude during the game. (5) The profile of competence shows that 93% of the students are competent and 7% of the students are incompetent; (6) Based on the opinions of physical education and sport health teachers, the assessment instruments for volleyball can be used easily.



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