

# Model Learning approach to spike a volleyball Play for junior high school students

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**Submission date:** 22-Feb-2022 10:55AM (UTC+0700)

**Submission ID:** 1768044959

**File name:** 21.\_Akhmad\_2019\_J.\_Phys.\_Conf.\_Ser.\_1387\_012057\_1.pdf (462.29K)

**Word count:** 3371

**Character count:** 17962

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To cite this article: Imran Akhmad and Mesnan 2019 *J. Phys.: Conf. Ser.* **1387** 012057

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## Model Learning approach to spike a volleyball Play for junior high school students

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**Abstract.** The aim of this research is to develop a model learning Smash volleyball approach play for junior high school students. This research uses the method Research and Development (R & D). Research steps as follows; needs analysis, design development, expert validation, revision, field trials of stage 1, revision field trials of stage 2, final products, revision, implementation and dissemination. The technique of data collection was done through interviews and questioner. Data analysis techniques using descriptive statistics and non parametric statistics with calculations using SPSS. The research concluded that (1) The learning model smash a volleyball pattern approach play can help students learn effectively and efficiently.(2) the learning model that has been developed, has the impact of positive against the motivation and the active involvement of students in following the process of learning.

**Keywords:** The Learning Model, he approach play , smash a volleyball

### 1. Introduction

Physical education is one of a conscious effort to create an environment that is capable of influencing the potential learners so that towards positive behaviour through physical activity. Physical education has the purpose of developing a comprehensive individual aspects of affective, cognitive and psychomotor. To achieve the goal of education as a whole then physical education should be implemented properly and correctly through the application of learning model.

Currently, changes to the assessment of the general public as users of the quality of physical education (PE) continues to decline. This is because the quality of learning processed did not experience significant changes. Poor quality of learning of PE teacher due to lack of understanding of the teacher about the learning innovation [1]. The impact of the low quality of the PE teacher then learning competency PE achievement of insufficient. One of the difficult learning achieved by students of SMP is smash volleyball. In addition to inadequate quality of learning also found empirically about system assessment of competency-based learning and character. Tendency of assessment of competence conducted separately when learning. SMP curriculum changes from KTSP became K 13, concentrates on the balance between cognitive, affective and psychomotor learning motion [2]. This means that, should the learning models can be ensured through the realm of cognitive, affective and psychomotor simultaneously. Necessity in integrating character education on the process of learning PE has been reached competence grouping is expected to be the three of them together.

The learning model developed in this study is a model of competence-based learning in volleyball smash material. The learning system has implemented a curriculum K 13 so there are changes in several aspects include; Learning device, learning models and system assessment. An understanding of



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the learning device is seen through the two aspects, namely; 1) aspects of how teachers teach and (2) the aspect of the results of the study [3]. 1) The aspects of how teachers teach and (2) the aspect of learning outcomes K 13 is identical to the scientific approach, namely; observation, ask, looking for information, association, and communication study [4]. Assessment on competency-based 13 K based on the rubric assessment consisting of the assignment, motion skills, attitudes and knowledge. Organized by rubric score performance the performance shown students appropriate competencies [5]. Based on the results of observation and interviews conducted by researchers with a PE teacher at one of the city of Medan that is known that the learning process less effective PE that is often times students in the smash ball is not able to cross from the net, and the ball is not right on target at the volleyball game or out of game field volleyball. The karenakan ball with the hand still was not right so it's not right on target or targets. When learning is taking place, students are less enthusiastic and not interested in following the lesson material volleyball.

Research and development is a strategy or a pretty good research methods in improving the learning of motion. Research development of research is used to produce a particular product and test the effectiveness of the product [6]. Measures for the development of models of instructional design, which includes: (a) identify instructional goals; (b) conducting a goal analysis; (c) analysis learners and contexts; (d) write performance objectives; (e) develop assessment instruments; (f) develop instructional strategy; (g) develop and select instructional materials; (h) design and conduct formative evaluation; (i) revise instruction; and (j) design and conduct summative evaluation [7]. The tenth step the model shows a very clear relationship and uninterrupted between step one with the other, the system is very compact, but solid and clear from one stage to the next stage. Learning the smash volleyball approach play was done to assist students in developing aggressive behaviour of the aggressive and saturation. The play has a variety of benefits that can be felt directly by children. In addition to cause pleasure, play into a means of children in order to develop themselves optimally, both on the physical aspect, motor, social-emotional, cognitive, and language. Play contributes unique to child development. Play can be used to assist in developing the potential of physical, cognitive, emotional, and social. Here are presented a few influences play for child development. (1) the development of the skills of motion, (2) the physical development and physical freshness, (3) the urge to communicate, (4) channelling for the emotional energy that pent-up, (5) distribution for your needs and desires, (6) learning resources, (7) stimulus for creativity, (8) the development of self-insight, learning community (9), (10) the development of personality [8].

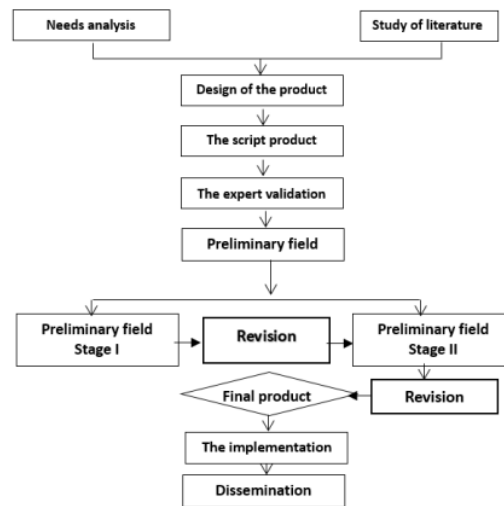
The development model of learning is a series of processes or activities conducted to generate a learning model based on the theory of development. The model of learning is the use of the learning systems approach. Many models of learning are developed by experts in their field, each model has different characteristics and different uses. Basically all the learning model developed is aimed at increasing learning results.

## 2. Method

The design of this research use research and development (R & D) is a process used to develop and validate educational products [9]. This research is intended to develop a model learning smash a volleyball pattern approach to playing for SMP students. The measures consist of research; (1) the collection of data and information (literature study, observation, class) and as well as needs analysis. (2) planning (determination of competency, the formulation of the concept of skill smash volleyball, determining the order of teaching, and a small scale test). (3) Develop the initial product shape (preparation of instructional materials, preparation of learning device, learning and assessment). (4) Conducting trials phase I (performed at the 2-3 school, the use of the 10 subjects). (5) Did the revision phase I (adapts to input). (6) conduct a test phase II (with 1 school with 15 students). (7) Conduct phase II product revision (readjust with the advice and input). (8) field test includes 2 schools with 60 students with 3 times, (9) Dissemination. (10) reporting.

The design of the development model of learning spike a volleyball pattern approach to playing for SMP students can be seen in the image below.



Figure 1. Model Development with *Flow Chart*

Assessment criteria using a scale with scale likers 1-4. [10]

Table 1. Standard Quantitative Data conversion to qualitative Data

Average Score	Criteria	Description
$3,5 \leq M \leq 4,0$	Very Good	Can be used without revision
$2,5 \leq M < 3,5$	Good	Can be used with a little revision
$1,5 \leq M < 2,5$	Good Enough	Can be used with many revisions
$0,0 \leq M < 1,5$	Less Good	Can not be used

Description:  $M$  = average score for every aspect of the assessed

The criteria used to decide that the instrument can be used is when the mean ( $M$ ) the results of the assessment to the overall aspects of the minimum criteria of being in a "very good". If less than that, done a revision based on the advice of the validator with a look back on the aspects that are worth less. In addition to considering aspects of validity, practicality is expressed also through details of the instruments is observed at the time the learning process takes place. To measure the degree of agreement of antarpenilai (interrater reliability) against the results of the assessment instrument validation/research, analyzed with statistics SPSS yakni Kruskal Wallis

### 3. The results of the research and the discussion

Based on the design of the research then the research results as follows; (1) pre-trial stage of development. Pre development phase consists of requirements analysis and generates the importance of learning through play volleyball smash. It also identifies the various needs that will be used in learning, competencies will be achieved, media of learning, the assessment, student worksheets and tools supporting teaching and learning. (2) Development stage, at this stage do the design and development of early learning models prototife spike a volleyball pattern approach play. Early models are written in the form of a script or storyboard of the script with the present forms of model learning approach to smash a volleyball play for students of SMP. The design of the model involves a teacher of physical education, sports experts and professors of physical education through the method of focus group discussion (FGD). Another product that is produced is the formulation of competence to be accomplished students, learning Devices such as; module, RPP, student worksheets, media), and instrument ratings. The initial product of the internal validation done next by 3 persons i.e expert Professor of physical education, sports experts and practitioners/teachers of physical education.

Advice and input from the validator note as a basis for revising the draft initial model products. There are 4 important indicators which become input validator that is; (a) the design of the RPP refer to quality standards, (b) assessment involves 3 competence i.e. cognitive, affective and psychomotor, (c) psychomotor assessment assessed through the rubric.

After validation experts continued with trials phase I toward upper-class students as many as 15 students in the category of small groups and teachers of physical education. Phase I trials are meant to identify problems that may occur in the process of teaching and learning at the same time collecting data quality improvement study with qualitative study through small scale. Having identified various problems of teaching and learning further revised to improve the quality of learning. The research continued with the trial phase 2 against 2 school each student's grade 1 in the category of large groups and teachers of physical education. This test is intended to obtain information about the problems of the learning process with a larger scale. Test the effectiveness of the Learning Model smash a volleyball against aspects of the implementation of the learning that is implemented through 3 meetings. The results of the assessment of the learning process can be seen in table 1.

Table 2. results of the assessment of the activity of the Teachers of physical education

Aspects that are assessed	Observer (P)	The Results Of The Assessment/Meeting To			Average Aspect	Category
		1	2	3		
Aspect of The Preparation	P1	3,20	3,40	3,98	3,53	Very Good
	P2	3,00	3,60	4,00		
	<b>Average</b>	3,10	3,50	3,99		
Aspects of the core activity	P1	3,00	3,80	3,94	3,58	Very Good
	P2	3,10	3,67	3,98		
	<b>Average</b>	3,05	3,73	3,96		
Aspects Of The Cover	P1	3,00	3,67	4,00	3,56	Very Good
	P2	3,20	3,50	4,00		
	<b>Average</b>	3,10	3,58	4,00		

Assessment criteria = > 3,51 (very good)

The results of observation of the activity of the teachers of physical education teaching in the category at the time. The overall increase in the activity of the teachers teaching in the implementation model of learning increases at each meeting. This shows that the model of learning the smash volleyball with playing approach can be used.

Table 3. results of Student Activities Assessment

Aspects that are assessed		The Results Of The Assessment/Meeting To			Average Aspect	Category
		1	2	3		
Aspect of The Preparation	SMP1	3,34	3,74	3,96	3,69	very good
	SMP2	3,40	3,79	3,92		
	<b>Average</b>	3,37	3,76	3,94		
Aspects of the core activity	SMP1	3,50	3,84	3,90	3,70	very good
	SMP2	3,26	3,80	3,92		
	<b>Average</b>	3,38	3,82	3,91		
Aspects Of The Cover	SMP1	3,70	3,88	3,98	3,84	very good
	SMP2	3,68	3,81	4,00		
	<b>Average</b>	3,69	3,84	3,99		

Assessment criteria = > 3,51 (very good)

The results of observation of the activity of the students of physical education at the time of learning in the category. Overall an increase in the activities students learn on the learning model of

implementation increases at each meeting. This shows that the model of learning the smash volleyball with playing approach can be used.

After analysis of the observations further learning activities carried out taking action against the assessment achieved competence can be seen in table 3.

Table 4. Results achieved Competency

No	The Subject Test	Aspects that are assessed	Assessment		
			T	R	M
1	SMP 1	Cognitive	89	76	82,5
		Affective	85	80	82,5
		Psychomotor	94	82	88
2	SMP 2	Cognitive	80	78	79
		Affective	92	89	95
		Psychomotor	98	94	96
Average			87,17		

Description: R = The lowest T = The highest M = Average

The results of the assessment of the achievement of the competencies on three aspects of cognitive, affective, and psychomotor described as follows. The results of the achievement of competencies in students of SMP 1 as much as 32 students and on the in SMP 2 numbered 30 students demonstrate achievement of the value of the average value of adequately = 87.17. It can be concluded that the product model of learning which developed volleyball smash has demonstrated the success of students in attaining the KKM.

#### 4. Discussion

The results showed that the product of the model of teaching and learning effective and practical device can be applied to materials with approach play volleyball smash. The impact of the application of the product can help raise the achievement of learning objectives of physical education in particular material smash a volleyball in volleyball for SMP students. The effectiveness of learning the achievement learning goal standards is demonstrated by KKM. Learning of PE learning approach effective if principles are: (1) students are trained in accordance with the working environment and introduced the real situation to think, feel, behave; (2) experience of the exercises that are done regularly to form habits of work and thinking increases the work achievement; and (3) are taught by teachers who have had experience of the method, and succeeded in applying knowledge, skills in Learning Model is based on the level of needs of students in motion activity, which psychologically, then in model This application is done with the principle approach play [11].

The indicators that have been developed in competency profile SKKD installation electrical installation the simple building is an important part in the design of competency-based curriculum. It strengthens the learning device component that becomes products research the development of competency-based learning, such as modules, RPP, media, scoring rubric. In addition, it is also supported by the results of research [12].

The success of the test tool of learning, shows a picture of the overall results of increased trend towards the activity of the teachers and students during the test and test small group expanded, both from the aspect of the implementation phases of learning (learning syntax) as well as learning devices are developed [13]. The attainment of competencies in students is measured through assessment rubric on the cognitive, affective and psychomotor. Achievement of the value students from each of the subject adequately, in attempting to obtain the mean value over the value of the KKM.

#### 5. Conclusion

Based on the results of the research of the development model of learning the smash volleyball with playing for SMP students' approaches found to be effective learning model. In accordance with the mean average comparisons between schools 1 school 2. This shows that the achievement of competency in the teaching and learning process as a whole is very high. Including teachers in



providing an assessment of three aspects namely aspects of cognitive, aspects of affective and aspects of psychomotor.

Assessment of the effectiveness of the overall learning showed that students and teachers responding actively so as to achieve the goal of learning is measured through the attainment of competencies, which reached students in two schools with duration high value.

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