



Development Of Learning Tools Through Teachers And Students Centered Approaches

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ABSTRACT

The purpose of this study was to determine the validity, practicality and effectiveness of badminton learning tools. The research method used was the Research and Development (R&D) method with the ADDIE Model (analysis-Design-Develop-Implementation-Evaluation). Research subjects and validators in this study is a material experts, media experts and students totaling 30 students. The data collection tools used questionnaires and badminton skills tests. The data analysis technique used is the average questionnaire formula and badminton skills test. The results showed (1) the teaching materials developed in this study met the valid criteria (2) The teaching materials developed in this study met the practical criteria. (3) The teaching materials developed in this study meet the criteria of being effective.

Keywords: Learning Tools; Badminton Skill; Teacher-Student Center Approach

INTRODUCTION

Education is a major factor that plays a role in shaping the good or bad of the human person. In addition, education is a sector that greatly determines the quality of a nation. In line with that Munirah (2015) states that the progress and development of education is a factor in the success of a nation. The basis for the development and progress of the country depends on the educational system and techniques. To step gradually with the changing times, the education system also needs to be improved (Parikh, 2016). Educational objectives in Bloom's taxonomy are divided into three domains of intellectual behavior, namely cognitive, affective and psychomotor (Kuboja, 2015). Schools and colleges that have a central role in building and shaping character, attitude and mental attitude towards the resulting output in order to be highly competitive. They are prepared so that they will not be unable to compete with foreign workers who have entered the current era of globalization. In the educational process,

teaching and learning activities are the most important activities (Yudiana, 2010).

The success or failure of achieving educational goals depends a lot on how the teaching and learning process is designed and run professionally. Every teaching and learning activity always involves two active actors, namely teachers and students. The combination of teachers and students will give birth to educational interactions by utilizing teaching materials as the medium. Ideally, the development of teaching materials has been mastered by educators well, but in reality there are still many educators who have not mastered it. Hamalik in Harjanto (2008: 220) says that in the development of teaching materials, various aspects can be used as benchmarks, including: (1) Concept is an idea or idea. (2) A principle is a basic truth as a starting point for thinking or is an indication for doing or implementing something. (3) Facts are things that have happened or that have been done or experienced. (4) The process is a series of change, developmental movements. (5) Value is a pattern, size or is a type or model. (6) Skills are the ability to do something good. so that in carrying out the learning process there are still many conventional ones. The impact of conventional learning, among others, is that the activity of educators is more dominant and conversely, students are less active because they are more likely to be listeners. Besides that, the learning he does is also less interesting because the learning is less varied.

In the development of teaching materials carried out in this study. Researchers used a teacher and student-centered learning approach. Teacher Centered learning (TCL) is teacher-centered learning where the teacher determines the goals of teaching and maintains the learning environment in the classroom is focused and structured enough (Arends, 2008). Meanwhile Student Center learning (SCL) according to O'Neill, Geraldine and Tim McMahon in Hamalik (2004) that "student-centered learning as focusing on students' learning and what students do to perceive this, rather than what the teacher does". O'Neill's opinion explained about student-centered learning activities. Students learn from what they do, not from what the teacher says.

METHOD

The research method used is to use the Research and Development (R & D) method. with the ADDIE Model (analysis-Design-Develop-Implementation-Evaluation). This model was developed by Dick and Carry. According to Mulyatiningsih (2011), the ADDIE model is a model that is considered rational and more complete than other

models. The steps in developing badminton learning teaching materials with the ADDIE model are:

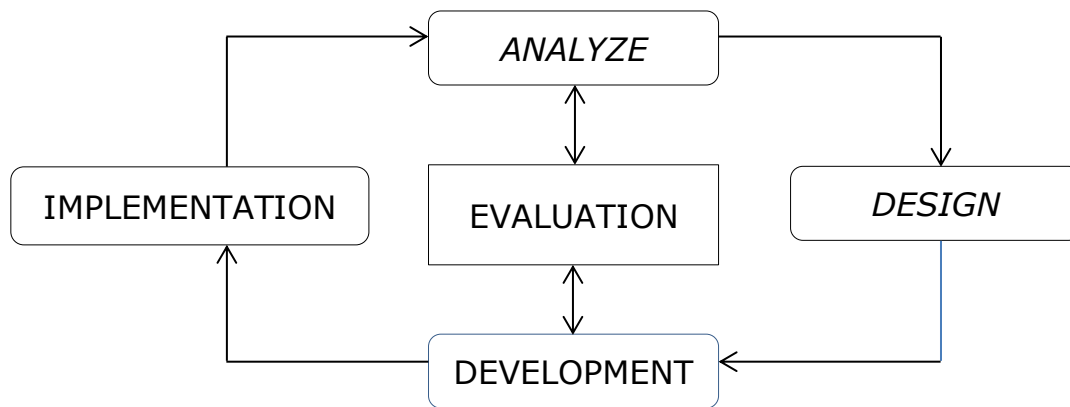


Figure 1. ADDIE model development flow

The location in this study is SMP N 09 Pontianak. Research subjects or validators in development research are a group of material experts, media experts and 30 students as the test object. Data collection techniques used questionnaires and badminton skills tests. The data analysis used in this research and development is the percentage. The analysis used is able to support the achievement of the objectives of research and development activities, namely the effectiveness of badminton teaching materials.

RESULTS AND DISCUSSION

Result

Analysis of the data on the development of teaching materials for badminton learning courses was carried out to determine the validity, practicality, and effectiveness of the teaching materials developed, by analyzing the data obtained from the development and application stages. Analysis of the validity and practicality of developing learning tools is carried out by analyzing the results of validation by the validator. Meanwhile, the effectiveness of learning tools is carried out by analyzing data on teacher activity results, student activity data, student response data, and student learning outcome data.

The validator's assessment of teaching materials is based on several categories of material suitability assessment, material accuracy, material support, material and language up-to-date. Following are the results of the validation of the two validators which are presented in the table below:

Table 1
Validation Results of Teaching Materials

No.	Aspect	Indicator	Validator		RV	RT
1	Content eligibility	suitability of the material	4	4	4	3.87
		accuracy of the material	4	4	4	
		supporting material	4	3	3.5	
		up-to-date material	4	4	4	
2	Language	Using good and correct Indonesian rules	4	4	4	3.75
		The accuracy of the sentence structure	3	4	3.5	
		Average Total Validity				3.81

Based on Table 1 above, the total validity average is 3.81. Then to find out the validity category of teaching materials. The average value of the total validity is adjusted to the validity category of the teaching material.

Table 2
Category of the Validity of Teaching Materials

Average Total Validity	Score Interval	Validity Category
3.81	$3 \leq RV < 4$	Valid

From the results above, the teaching materials developed can be concluded in the Valid category.

Teaching material is said to be practical if the validator states that it can be used in the field with a few revisions. Following are the results of the validator's assessment of the practicality of teaching materials.

Table 3
The results of the practicality of teaching materials

Teaching materials	Validator	Score	Information
Badminton Teaching Materials	1	B	Can be used with minor revisions
	2	B	Can be used with minor revisions

Based on table 3 above, the two validators provide practicality value for teaching materials with a value of "B" which is in the good category and can be used with a little revision. Teaching materials that have been revised according to the validator's suggestions and assessments as listed in the table above, the teaching materials can be used in the field to be tested on a number of students. Thus it can be concluded that the teaching materials are included in the practical category.

Based on the learning outcomes data before and after the development of badminton teaching materials, which was carried out using badminton learning outcomes tests. The learning outcomes before the development of badminton teaching materials can be seen in table 4 below.

Table 4
Learning Outcomes of the Development of Teaching Materials

NO	NAME	LONG SERVICE	LOB	DROPSHOT	SMASH	AMOUNT	INFORMATION
1	Arifia Rizky Fajri	20	17	15	13	65	GRADUATED
2	Ammar Banyu Rasyfillah	20	17	16	15	68	GRADUATED
3	Yogi Triyadi	16	14	16	15	61	GRADUATED
4	Billy Jenavi	14	18	18	11	66	GRADUATED
5	Budi Kurniansyah	15	15	15	15	60	GRADUATED
6	Tryandro Putra Friyatman	17	19	19	17	72	GRADUATED
7	Muhammad Rangga	18	16	14	14	62	GRADUATED

NO	NAME	LONG SERVICE	LOB	DROPSHOT	SMASH	AMOUNT	INFORMATION
8	Muhammad Adif .V	16	14	16	12	59	YET PASSED
9	Ajie Zulham Alfikri	14	16	16	18	64	GRADUATED
10	Satrio Dwi Prasetyo	14	16	16	14	60	GRADUATED
11	Horizon Bahana Satria	15	15	15	16	61	GRADUATED
12	Ayu Sekarningsih	15	15	15	17	62	GRADUATED
13	Siti Khumairoh	12	16	16	19	63	GRADUATED
14	Syafa Rizfika Danti Putri	15	15	14	15	61	GRADUATED
15	Wahyu Adi Saputra	14	19	16	13	62	GRADUATED
16	Riski Fandaja	14	17	19	12	62	GRADUATED
17	Hafzalia Haficha	16	15	16	13	60	GRADUATED
18	Indah Nofiani	12	15	18	18	63	GRADUATED
19	Nabila Salsabila	16	14	16	16	62	GRADUATED
20	Rizki Wibisono	15	19	14	14	62	GRADUATED
21	Fiqri Haiqal Fauzan	16	17	16	12	61	GRADUATED
22	Absor Ulil	13	16	15	18	62	GRADUATED
23	IvankaAzura Vidi	14	15	12	12	53	YET PASSED
24	Diya Sabitha Salwa	14	18	16	13	61	GRADUATED
25	Wardatul Jannah	14	17	17	14	62	GRADUATED
26	Arif Julianto	16	16	15	14	61	GRADUATED
27	Rangga Permana	15	15	17	16	63	GRADUATED
28	Trio Irvan Firdaus	16	17	16	13	62	GRADUATED
29	Muhammad Zakky P	14	14	12	14	54	YET PASSED
30	Muhammad Tri Oktavianda	13	14	15	16	58	YET PASSED

Table 5
Percentage of Graduation Per Class

Information	amount	Percentage
Students who graduate	26	86.7
Students who do not graduate	4	13.3

Based on the data above, it is known that of the 30 students, 26 students are in the sufficient category, meaning that the students have reached the competency determined by the sufficient category and there are 4 students who have not reached the predetermined competence. Table 4.5 shows the percentage of students who passed was 86.7% while the percentage of students who had not passed was 13.3%. So it can be concluded that student learning outcomes have met the classical passing criteria.

Discussion

The teaching materials developed in this study meet valid criteria. This is based on the results of the analysis of the validity of teaching materials which shows the average total score of validation of 3.87. Based on these results it can be concluded that it can be said to be "valid". However, further adjustments, improvements and refinements are needed so that the teaching materials developed can be used in physical education learning in schools.

The teaching materials developed in this study meet practical criteria. This is based on the results of the practicality analysis of teaching materials which shows the category "B" with the information "can be used with a little revision". Based on these results it can be concluded that it can be said to be "practical". However, further adjustments, improvements and refinements are needed so that the teaching materials developed can be used in physical education learning in schools.

Student learning outcomes based on the data show that of the 30 students, 26 students passed individually while there were 4 students who had not passed individually. This means that classically the percentage of the number of students who passed was 86.7% and the percentage of the number of students who had not passed was 13.3%. 4 students who have not passed due to obtaining a score below the predetermined value, namely 60. Researchers see several reasons for some students who have not passed

due to the lack of motor skills and other factors there is no motivation to want to actively train their abilities.

This conclusion are prove some of theory that motivation actively factor of student to train their ability. Then the further study will revealed that the currently used motivational tools were inadequate and undesired. It could also be deduced from the definition that having a motivated work force or creating an environment in which high levels of motivation are maintained remains a challenge for today's management. This challenge may emanate from the simple fact that motivation is not a fixed trait but rather a dynamic phenomenon as it could change with changes in personal, psychological, financial or social factors.(Orasa, 2014)

CONCLUSIONS AND SUGGESTIONS

The results of research and development can be concluded that (1) The teaching materials developed in this study meet valid criteria. (2) The teaching materials developed in this study meet practical criteria. (3) The teaching materials developed in this study meet the criteria of being effective. It is known that out of 30 students, 26 students passed individually while there were 4 students who had not passed individually. This means that classically the percentage of the number of students who passed was 86.7% and the percentage of the number of students who had not passed was 13.3%.

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