



## Improved learning outcomes of volleyball bottom passing through M-Card games in high school students

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### Abstrak

Tujuan yang hendak dicapai dalam penelitian ini adalah untuk meningkatkan semangat dan keterampilan peserta didik dalam pembelajaran bola voli. Metode yang digunakan adalah Penelitian Tindakan Kelas atau sering disebut dengan action research, dimana penelitian ini akan dilakukan melalui beberapa siklus dengan harapan akan terjadi adanya peningkatan terhadap hasil yang akan dicapai. Ada beberapa ahli yang mengemukakan model penelitian tindakan kelas dengan bagan yang berbeda, namun secara garis besarnya terdapat empat tahapan yang lazim digunakan, yaitu: (a) Perencanaan Pembelajaran, (b) Pelaksanaan Tindakan, (c) Pengamatan dan (d) Refleksi. KKM (Kriteria Ketuntasan Minimal) adalah kriteria paling rendah untuk menyatakan peserta didik mencapai ketuntasan. Guru atau kelompok guru menetapkan KKM mata pelajaran dengan mempertimbangkan tiga aspek kriteria, yaitu kompleksitas, daya dukung, dan intake peserta didik. Berdasarkan hasil penelitian dalam pembahasan meningkatkan keterampilan passing bawah permainan bola voli melalui metode M-Card siswa kelas X SMK Aisyiyah Insan Utama Prabumulih dapat disimpulkan sebagai berikut: Pra Siklus memperoleh tingkat pencapaian sebesar 21% Siklus I memperoleh tingkat pencapaian sebesar 57% termasuk kategori rendah, Siklus II memperoleh tingkat pencapaian sebesar 92% termasuk kategori tinggi. Melalui metode M-Card pada pembelajaran passing bawah bola voli dapat meningkatkan keterampilan Passing bawah permainan bola voli. Hal ini sesuai dengan pengamatan peneliti yang telah dilakukan pada siswa mulai dari Pra Siklus Siklus I sampai Siklus II sehingga dengan metode M-Card dapat meningkatkan Passing Bawah pada permainan bola voli.

**Kata Kunci:** Passing, Bola Voli, Permainan, M-Card, Siswa.

### Abstract

*The goal to be achieved in this study is to improve the enthusiasm and skills of students in learning volleyball. The method used is Classroom Action Research or often referred to as action research, where this research will be carried out through several cycles in the hope that there will be an increase in the results to be achieved. There are several experts who propose classroom action research models with different charts, but broadly speaking there are four stages that are commonly used, namely: (a) Learning Planning, (b) Action Implementation, (c) Observation and (d) Reflection. KKM (Minimum Completeness Criteria) is the lowest criterion to declare students to achieve completeness. The teacher or group of teachers determines the KKM of the subject by considering three aspects of criteria, namely complexity, carrying capacity, and intake of students. Based on the results of research in the discussion of improving the lower passing skills of the volleyball game through the M-Card method of grade X students of SMK Aisyiyah Insan Utama Prabumulih can be concluded as follows: Pre-Cycle obtained an achievement rate of 21% Cycle I obtained an achievement level of 57% including the low category, Cycle II obtained an achievement level of 92% including the high category. Through the M-Card method on learning to pass under volleyball can improve the skills of passing under the volleyball game. This is in accordance with the observations of researchers who have been made on students starting from Pre-Cycle Cycle I to Cycle II so that the M-Card method can improve Bottom Passing in volleyball games.*

**Keywords:** Passing, Volleyball, M-Card, Student.

## Introduction

In Indonesia, volleyball began to be competed in 1962 in Yogyakarta. After that, volleyball matches continued to be carried out and experienced rapid development [1]. As is known that formal education is one place in preparing athletes who have the ability in their respective fields of play [2]. Volleyball is a type of sport that requires skill and mastery of technique [3]. In the game of volleyball there are several basic volleyball techniques that must be mastered by every player including serve, block (dam), tosser (set upper) passing (passing the ball), passing down, passing up, smash (attack punch) there are several types of smashes namely open smash, quick smash, long smash [4]. Volleyball is a type of sport that requires skill and mastery of technique [5]. This is because considering that in this sport, a player is required to be able to keep the ball in the air and must not touch the ground [6]. In addition, players are required to be able to create punches that make the opponent unable to control the ball perfectly to produce points [7]. This process can be created, if a player is able to master volleyball playing techniques well, one of which is the bottom passing technique in volleyball games [8].

Of the several volleyball techniques above, passing is the main foundation for playing the game of volleyball [9]. There are two types of passing in volleyball games, namely bottom passing and top passing [10]. Bottom passing is important for a volleyball player to master as a defense of the smash [11]. The bottom passing technique can also be used as a defense, receiving serves that will bounce the course of the match and receiving smashes from opponents, as well as after taking a block or bouncing the ball from

the net [12]. In volleyball games there are often passing errors made by players lack of concentration, nervous so that the ball receiver does not fit, the wrong position of the player's hand, the wrong hand angle when receiving the ball from the opponent, the success of giving the ball to the set-upper or the ball passer often misses So that bottom passing practice is very necessary for the strong foundation of the volleyball team, in order to be able to direct the ball to friends precisely and quickly to build a good initial attack, it is necessary to practice bottom passing seriously [13].

In the game of volleyball there are several basic techniques, namely service, passing, smash and blocking. For bottom passing, mastery of bottom passing techniques by students tends to be low [14]. Many factors affect the low mastery of the lower passing technique, either due to factors from teachers, students or due to limited infrastructure for passing practice [15].

Mini volleyball learning in schools aims for students to be able to reach the peak of expected achievement [16]. To achieve this goal, learning that can motivate students and learning that is interesting and fun. However, learning mini volleyball in schools still experiences many obstacles, both internally and externally [17]. One of the efforts to develop volleyball coaching is to apply, simple learning and emphasize basic volleyball techniques but in the application of simple learning is constrained, namely (1) most students still do not seem to be actively involved in learning, (2) lack of student motivation in learning, (3) learning is still not interesting, (4) students' bottom passing ability is still very low. And through observation, the sample for the study is class X because there is only 1 class of students as many as

89% cannot do the Bottom Passing properly and correctly based on, the value below the Minimum Completeness Criteria.

Some basic techniques must be known and mastered by a volleyball player. Mastery of technique is important to understand so that one can play well and correctly [18]. Without having an understanding of good volleyball playing techniques, a person will not be able to get good results when playing volleyball, remembering to direct the volleyball to stay in the air, but still in good control to be directed precisely, certainly not an easy thing to do, mastery of this technique can be obtained through the process of practicing correctly and purposefully [19]. This means that one must have a guide on how to hit the volleyball correctly and correctly [20].

Based on these problems, researchers plan to improve the problem by applying the M-Card to simple learning. The application of M.-Card in overcoming this problem with the consideration that M.-Card is a technique for presenting subject matter using visual-based media in the form of cards. Based on the background of the problem as described above, it interests the author to, try to conduct classroom action research with the title "Improving Learning Outcomes of Volleyball Bottom Passing through M-Card Games in Class X Students of SMK Aisyiyah Insan Utama Prabumulih".

## Method

The method used is Classroom Action Research or often referred to as action research, where this research will be carried out through several cycles with the hope that there will be an increase in the results to be achieved [21]. There are several experts who propose classroom action research models with different charts, but in general there are four stages that are commonly used, namely: (a) Learning Planning, (b) Action Implementation, (c) Observation and (d) Reflection [22]. KKM (Minimum Completeness Criteria) is the lowest criterion to declare students to achieve completeness. The teacher or group of teachers determines the KKM of the subject by considering three aspects of criteria, namely complexity, carrying capacity, and intake of students.

## Results and Discussion

### Result

This research was carried out in two cycles which consisted of two meetings, namely theory and practice. Quantitative data in the form of student learning outcomes obtained in each evaluation at the end of the cycle. The cycle will be carried out in cycle I on June 6, 2023 and cycle II on July 6, 2023, The following will be presented the results of research consisting of observation of student skills and activities, as well as Bottom Passing learning outcomes by applying the M-Card model. The results obtained by students before being given action can be seen in the table below.

Table 1. Volleyball Bottom Passing Test Score List

No	Name	The Value of Practice	Information
1	JN	60	-
2	DN	60	-

3	YG	60	-
4	EN	70	-
5	PD	70	-
6	RV	65	-
7	RD	62	-
8	IB	60	-
9	PK	62	-
10	ST	60	-
11	TN	60	-
12	AT	62	-
13	AH	65	-
14	JP	70	-

The initial data on student learning outcomes obtained on the daily test scores of grade X students of SMK Aisyiyah Insan Utama Prabumulih before being given cyclical actions using the M-Card method (precycle) on the Lower Passing Volleyball material was a class average score of 6.3. Data shows that there are 11 students below the KKM score and 3 people have fulfilled the KKM out of 14 students in grade X of SMK Aisyiyah Insan Utama Prabumulih or about 89% have not completed the PJOK subject, especially the Lower Passing Volleyball material with a grade KKM score of 7.0.

### Cycle I

#### a. Planning

- 1) Prepare a Learning Program Plan (RPP) with Bottom Passing Volleyball material.
- 2) Compiling the Bottom Passing test instrument
- 3) Prepare assessment sheets and learning outcomes
- 4) Compile observation sheets

5) Prepare the necessary media to assist in teaching

6) Prepare research sites and learning tools

#### b. Implementation

- 1) Have students line up neatly and pray before the performance
- 2) Explain how the Bottom Passing Movement without the ball in a gradual way, namely: Warm-up, Core, and Cooling
- 3) Arrange a group form that will later take the M-Card randomly and perform commands in it by means of assessment using instruments, so that it will get the results of the assessment.

#### c. Observation Results of Cycle I Implementation

The observation activities in the implementation of cycle I consist of:

- 1) Observing student activities in learning the Bottom Passing Volleyball Game using the M-Card

- method, students are very enthusiastic
- 2) Conduct student assessment in Bottom Passing Volleyball learning using the M-Card method
  - 3) Processing the Lower Passing Volleyball Learning Outcome Value using the M-Card method.

Table 2. Tabulation of Student Assessment Results of Observation of the Implementation of Cycle I

No	Name	The Value of Bottom Passing Practice			Sum	Final Grades	Information
		1	2	3			
		1	JN	7,5			
2	DN	8,3	7,5	7	22,8	7,6	Complete
3	YG	7	6	6	19	6,3	Incomplete
4	EN	8,3	7,5	7	22,8	7,6	Complete
5	PD	8,3	7,5	7,5	23,3	7,8	Complete
6	RV	8,3	7,5	7	22,8	7,6	Complete
7	RD	8,3	7	7,5	22,8	7,6	Complete
8	IB	8,3	7,5	7	22,8	7,6	Complete
9	PK	8,3	7,5	7	22,8	7,6	Complete
10	ST	5	5	6	16	5,3	Incomplete
11	TN	6	6	7	19	6,3	Incomplete
12	AT	5	7	6	18	6,0	Incomplete
13	AH	5	6	6	17	5,7	Incomplete
14	JP	5	6	7	18	6,0	Incomplete

From the data of the first cycle above, the results of 8 students completed achieving KKM scores and as many as 6 students below KKM scores, it can be concluded that the average grade-class of students is 6.9 with a success criterion of 7.0. This means that this research will continue to the next cycle, namely cycle II.

**d. Reflection**

The data above shows an increase from Pre-Cycle The grade average score of 6.3 to 6.9 or 57% means that there is an increase in the average grade point of 0.6% because there are still students who lack focus and understand the material provided, so there is a need for motivation and implementation of further actions to achieve completeness scores

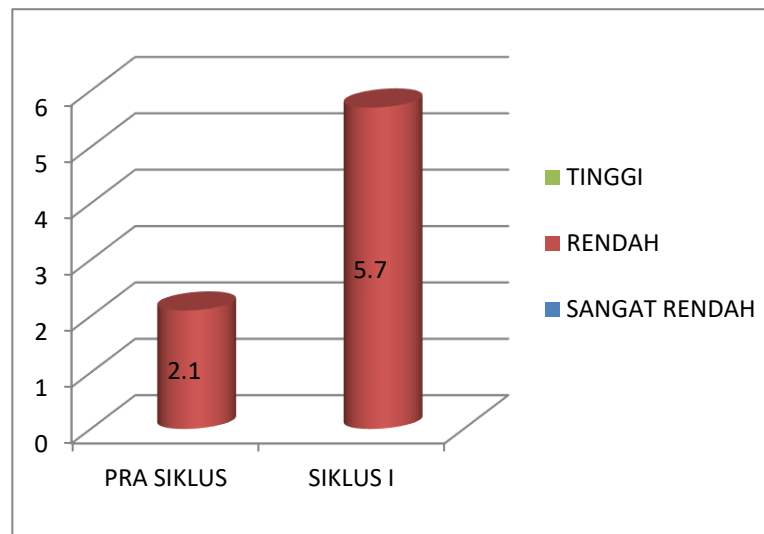


Figure 1. Graph of Research Results

**Cycle II**

**a. Planning**

- 1) Prepare a Learning Program Plan (RPP) with Bottom Passing Volleyball material.
- 2) Compiling the Bottom Passing test instrument
- 3) Prepare assessment sheets and learning outcomes
- 4) Compile observation sheets
- 5) Prepare the necessary media to assist in teaching
- 6) Prepare research sites and learning tools

**b. Implementation**

- 1) Have students line up neatly and pray before the performance
- 2) Explain how the Bottom Passing Movement without the ball in a gradual way, namely: Warm-up, Core, and Cooling
- 3) Arrange a group form that will later take a random M-Card and perform commands in it by means of assessment using instruments, so that it will get the results of the assessment.

**c. Observation Results of Cycle II Implementation**

The observation activities in the implementation of cycle I consist of:

Table 3. List of Student Grades from Observation of Cycle II Implementation

No	Name	The Value of Bottom Passing Practice			Sum	Final Grades	Information
		1	2	3			
		1	JN	8,3			
2	DN	8,3	8,3	7,5	24,1	8,0	Complete

3	YG	7,5	7,5	7,5	22,5	7,5	Complete
4	EN	8,3	8,3	7,5	24,1	8,0	Complete
5	PD	8,3	8,3	8,3	24,9	8,3	Complete
6	RV	8,3	8,3	7,5	24,1	8,0	Complete
7	RD	8,3	7,5	8,3	24,1	8,0	Complete
8	IB	8,3	8,3	7,5	24,1	8,0	Complete
9	PK	8,3	8,3	8,3	24,9	8,3	Complete
10	ST	6	6	6	18	6,0	Incomplete
11	TN	7,5	7,5	7,5	22,5	7,5	Complete
12	AT	7,5	7	7,5	22	7,3	Complete
13	AH	7,5	7,5	7	22	7,3	Complete
14	JP	7,5	7,5	7,5	22,5	7,5	Complete

From the data of the second cycle above, the results of 13 students completed achieving KKM scores and as many as 1 student below the KKM scores with an average score of 7.7, it can be concluded that the average class of students who completed as much as 99% with research success criteria of 70%. This means that the study has been successful.

#### d. Reflection

From the data above, it shows an increase in excellent learning completeness, from the first cycle data by

57% to 99%, which means that there is an increase in class average scores by 42% in the second cycle because students are very excited. Among them is because there is motivation from the teacher and feel enthusiastic because they already understand the game or material provided using M-Card learning media. However, there is one student who is incomplete, namely ST because he does not understand the material provided using M-Card. And clarified in the graph below:

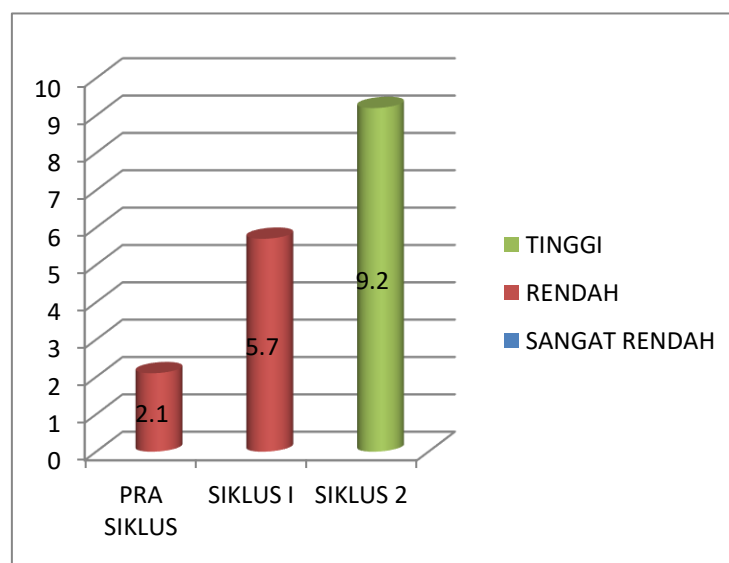


Figure 2. Graph of Research Results

## Discussion

The results of this study showed the results that the average score of students of 7.7 or 99% of students had succeeded in learning Volleyball Bottom Passing. And have met the minimum completeness criteria of 7.0 Encourage students to be more active in exploring the material and understand the material with more focus, increasing student confidence and motivation to study the material seriously increases with academic games that allow all group members to be active in giving scores to their groups so that students will understand the material well and student learning outcomes also improve.

In the study, it was found that students in their core need full motivation in learning so that students can play an active role and understand the material provided and students need learning modifications or learning updates so that students will get new experiences in following learning, especially rhythmic gymnastics. Researchers can compile updated theories in Volleyball learning, especially Bottom Passing Based on observations during Bottom Passing learning by applying the M-Card model in cycle I obtained an average score with low criteria. And get an average result below the research success criterion of 5.7%. Based on the results of observations during Lower Passing learning by applying the M-Card learning model in cycle II obtained an average score with Very Good criteria. And get results above the average research success criterion of 99%.

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