

# The Effectiveness of a Scientific Approach

*by Radhin Miftah*

---

**Submission date:** 08-Mar-2024 10:20AM (UTC+0700)

**Submission ID:** 2314828203

**File name:** 8.\_Radhin.\_81-90.edited.doc (480.5K)

**Word count:** 2903

**Character count:** 17378



## The Effectiveness of a Scientific Approach in Improving Bottom Passing Ability in Volleyball Games at the Vuttisat Vittanuson School in Thailand

Radhin Miftah Shiddiq<sup>1\*</sup>, Oman Hadiana<sup>2</sup>, Hana Astria Nur<sup>3</sup>, Nanan Abdul Manan<sup>4</sup>, Casnan<sup>5</sup>

<sup>1,2,3</sup> Department of Physical Education, Health and Recreation, STKIP Muhammadiyah Kuningan, Indonesia

<sup>4</sup> Department of Primary School of Teacher Education, STKIP Muhammadiyah Kuningan, Indonesia

<sup>5</sup> Department of Mathematic Education, STKIP Muhammadiyah Kuningan, Indonesia

email: [radhinmiftah@gmail.com](mailto:radhinmiftah@gmail.com)<sup>1</sup>, [hadianaoman@upmk.ac.id](mailto:hadianaoman@upmk.ac.id)<sup>2</sup>, [hanaastrianur@upmk.ac.id](mailto:hanaastrianur@upmk.ac.id)<sup>3</sup>, [nanan@upmk.ac.id](mailto:nanan@upmk.ac.id)<sup>4</sup>, [casnan@upmk.ac.id](mailto:casnan@upmk.ac.id)<sup>5</sup>

 <https://doi.org/10.20884/1.paju.2023.5.1.9178>

### Abstract

Learning Volleyball games at the Vuttisat Vittanuson school in Thailand, especially in lower passing ability, still needs to improve. The physical education teacher uses conventional methods, resulting in unproductive learning outcomes. This research aims to determine the effectiveness of a scientific approach on students' Volleyball passing abilities. This research is quasi-experimental research with a Pre-test and Post-test Group research design. The population in this study were Mattayom 5 students and 30 Vuttisat Vittanuson School students. The instrument in this research is a Volleyball passing ability test. The research results showed that, based on the pre-test and post-test scores, there was a significant increase. It is comprehended that there is a distinction in the positive influence of applying a scientific approach to students' passing ability in Volleyball.

**Keywords:** *Scientific Approach, Learning Outcomes, Lower Passing, Volleyball*

### INTRODUCTION

Education is a learning process between teachers and students to produce beneficial results. Physical education teachers should master and understand the effective basic concepts of physical education learning models (Pranopik, 2017). Various groups must recognize physical education as a component of education. Games and sports generally explain the learning process for physical education, sports, and health (Putra et al., 2021). Accomplishing conventional learning material with teacher-centered learning will cause boredom and less

Correspondent Address : STKIP Muhammadiyah Kuningan, Indonesia

Email: [radhinmiftah@gmail.com](mailto:radhinmiftah@gmail.com)



Physical Activity Journal (PAJU) This work is licensed under a [Creative Commons Attribution 4.0 International License](#).

learning. Physical education teachers who provide subject matter should turn to modern and attractive learning by providing more varied and contemporary strategies and materials. Improving learning strategies and materials will support students' abilities, especially in understanding learning material (Widarto et al., 2012; Manik & Sihotang, 2015).

Learning through a logical approach may be a learning handle outlined in such a way as to empower understudies to effectively develop concepts, laws, or standards through the stages of watching (to recognize or discover issues), defining issues, proposing or defining theories, collecting information utilizing different methods, analyzing information, drawing conclusions and learning destinations with a logical approach. The advantages of the learning process approach include (1) increasing intellectual abilities, especially high-order thinking skills; (2) developing students' ability to solve problems systematically; (3) creating learning-supportive circumstances; (4) obtaining high learning outcomes; and (5) training students in communicating, writing scientific articles, and; (6) developing student character (Machin, 2014). By applying a scientific approach through problem-solving teaching approach, it is expected that students will be able to understand and perform sports, specifically Volleyball sport, correctly following the application of a scientific approach through a problem-solving teaching approach (Pratama et al., 2020)

Volleyball is a team sport played by two teams of 6 players; each team competes to reach 25 points first. Volleyball is played on a specific field, separated by a net. This game can be indoors or outdoors (Hidayat & Pulung Riyano, 2018). Volleyball recognizes several basic techniques, including passing over, under-passing, serving, blocking, and smashing. These techniques are necessary and crucial for students to master basic techniques. Beutelstahl (2005) stated that to play Volleyball sufficiently; the individual should master controlling the ball first. Furthermore, underpassing is the first basic technique taught to students or beginner players. Overhead passing is a technique a volleyball player uses to direct the ball to a place or teammate.

Underpassing is a crucial technique for playing Volleyball (Martono et al., 2017). The uses of under-passing are for receiving a service ball and receiving a smash ball or attack from the rival, retrieving the ball after a block occurs or the ball bounces off the net, saving a ball that bounces far outside the playing field, or retrieving a low ball. The ball's

sudden arrival or passing failed to pass through the net, so less-than-perfect games cannot be played well (Saputra & Gusniar, 2019).

Several studies on the scientific approach to student volleyball learning outcomes stated that learning Volleyball in schools is material in the scientific approach. The curriculum is designed creatively to achieve the learning objectives

((Nugraha, 2017; Pratama et al., 2020). It is crucial for a learning approach/model to improve student learning outcomes in big ball games, especially Volleyball (Samsudin & Rahman, 2016). <sup>22</sup> Based on the results of field observations carried out by the author on students at the Vuttisat Vittayanuson School, Koh Lanta Noi, Thailand. Students need to improve their learning abilities and motivation. Their bottom passing ability still needs to improve to improve the volleyball game. They often failed to return the ball to the rival's area. The importance of a scientific approach in learning Volleyball provides students with scientific-based thinking patterns. They learn starting from observation, formulating questions from observations, trying or implementing, associating, and communicating orally and in writing, or by demonstrating skills. (Nugraha, 2017; Hartanti, Rachman, & Tuasikal, 2020). Previous studies have not applied a scientific approach to learning Volleyball passing, so the research strategically shaped students' cognitive domain through scientific steps (Dharmawan et al., 2023; Burhanuddin et al., 2022).

Analysts utilize a logical approach to apply a learning process planned so that understudies effectively develop concepts, laws, or standards. The stages are observing, defining issues, proposing or defining speculations, collecting information utilizing different methods, analyzing information, concluding, and communicating the concepts, laws, or standards found. The advantage of the research is providing knowledge and practicing considers experimentally.

## METHOD

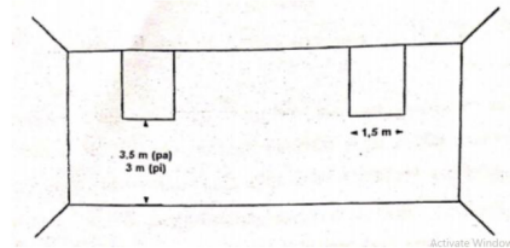
The research method researchers utilize is experimentation, which aims <sup>13</sup> to find the effect of certain treatments on others under controlled conditions (Sugiyono, 2016). The experiment operated a pre-experimental design. Experimental research of pre-experiments has various designs. The use of this design is adjusted <sup>19</sup> to the research aspects and the main problem to be expressed. The author uses A group pre-test and post-test design. <sup>2</sup> This research activity provides an initial test (pre-test) before and after treatment and then

gives a final test (post-test) as a research design. The research design can be observed in Table 1 below:

**Table 1.** Research Design *One Group Pre-test – Post-test Design*

Research Design		
Pre-test	Treatment	Posttest
O1	X	O2

The research population is 649 students at Vuttisat Vittayanuson School, Koh Lanta Noi, Thailand. In contrast, the research sample of Noitu students in class Mattayom 5 at Vuttisat Vittayanuson School Koh Lanta, Thailand, is 30 students. The Volleyball passing test measures Volleyball bottom passing ability (Nurhasan, 2007). The procedures for carrying out the Volleyball passing test are displayed in Figure 1 as follows:



**Figure 1.** Volleyball Passing Test Field

The data analysis technique used to analyze the difference between pre-test and post-test scores is the paired sample test (Gozali, 2013)

## RESULT

This research was conducted using a One-Group Pre-test and Post-test Design. The initial test (pre-test) was to determine the initial situation, and a final test (post-test) was given to determine the effect of the environment-based model on student learning outcomes after treatment.

Research results from 30 samples taken at the Vuttisat Vittanuson School, Koh Lanta Krabi, Thailand. From the pre-test data, the highest data was obtained at 22.12; the lowest data was 33.27; the mean was 28.501, and the standard deviation was 2.33. The post-test data was obtained; the highest data was 20.30, the lowest data was 29.10, the

mean was 25.538, and the standard deviation was 2.07. Details of the research results can be regarded in Table 2.

**Table 2.** Post-test Result Data for Volleyball Underpassing Test

No.	Information	Result
1.	Samples (N)	30
2.	The Highest Score	22,12
3.	Lowes Score	33,27
4.	Average	28,50
5.	Mode	27,9
6.	Range	11,15
.7.	Standard Deviation	2,33

**Table 3.** Pre-test Result Data for Volleyball Underpassing Test

No.	Information	Result
1.	Samples (N)	30
2.	The Highest Score	20,30
3.	Lowes Score	29,20
4.	Average	25,53
5.	Mode	24,69
.6.	Range	8.8
7.	Standard Deviation	2,07

**Table 4.** Pre-test Result Data for Volleyball Underpassing Test

	H	N	NTG	NTR	M	P
Post-	30	22,12	33,27	28,50		2,96
Pre-test	30	20,30	29,10	25,53		

The comparison of the pre-test and post-test results can be seen from the pre-test: the highest underpassing ability had a time of 22.12, and the lowest underpassing ability had a time of 33.27. Data from the post-test results of the highest underpassing ability with a time of 20.30 and the lowest underpassing ability with a time of 29.10 and the mean or average of the pre-test was 18.501, and the post-test was 25.538 so the difference in the mean of the pre-test and post-test was 2.963.

**Table 5.** List of Improved Pre-test and Post-test Passing Results

H	N	PBT	PBT <sub>r</sub>	M	P	Mo	SD
Post-	30	22,12	33,27	28,50	2,96	27,9	2,33
Pre-test	30	20,30	29,10	25,53		24,69	2,07

Comparative data on the results of the pre-test and post-test of Volleyball passing with a total of N of 30 stated that the pre-test results for the highest underpassing with a time of 22.12 and the lowest underpassing with a time of 33.27, with a mean of 28.50, mode pre-test data was 27.99 and the standard deviation was 2.33. The highest lower post-test result data had a time of 20.30, and the lowest underpassing had a time of 29.10 with a mean of 25.53. The post-test data mode was 24.9, and the standard deviation was 2.07, so an increase in the pre-test and post-test mean was 2.96.

**Tabel 5.** Hypothesis Test List

H	N	M	$\sum d$	$\sum xd$	$\sum d^2$
Posttest	30	28.50	71	0,2	10,452
Pretest	30	25,53			

Based on the hypothesis testing table, it can be noticed that the results of the experimental group's pre-test data were with an average of 28.501, and the experimental group's post-test data with an average of 25.538 and it is also known that  $\sum d$  was 71,  $\sum xd$  was 0.2, and  $\sum xd^2$  was 10.4524. Data from statistical calculations "t-test" obtained a result of 23.6 while the T table was 1.70, which was obtained from the T distribution table with  $dk(30-2)=28$  and a confidence level of 95% ( $\alpha=0.05$ ), listed in the table. Hypothesis testing criteria accept  $H_a$  if  $T_{count} > T_{table}(1-\alpha)$  and reject  $H_0$  if  $T_{count} < T_{table}(1-\alpha)$ . The value of count (23.6)  $>$  Table (1.70) means that there is a significant difference between the pre-test and post-test. The  $H_0$  hypothesis is rejected, and the  $H_a$  hypothesis is accepted.  $H_a$ , Noitu's statement, "There is an influence of the Scientific Approach on the lower Passing Learning outcomes of Mattayom class students at Vuttisat Vitayanuson School Koh Lanta Krabi, Thailand."

## DISCUSSION

This research aims to determine the improvement of basic underpassing technique abilities for Mattayom 5 class students at the Vuttisat Vittanuson school using a scientific approach. The research results showed a significant improvement in the basic technique of

underpassing with a scientific approach in Mattayom 5 class students at the Vuttisat Vittanuson school. This is proven by the calculated t-value in the test, the difference between the pre-test and the post-test in that the underpass ability is greater than the t-table so that the decision that can be taken is that there is an increase in the ability of the basic underpass technique of Volleyball with a scientific approach for Mattayom 5 class students in Vuttisat Vittanuson school.

Hypothesis testing shows a significant increase in bottom passing ability before and after being treated with a scientific approach. By providing a scientific approach learning model, basic passing techniques in Volleyball can be improved by 28.153%. It is based on the average increase from before being treated to after being treated with the 3 3 form of playing.

Sports activities at school are a vehicle for channeling students' interests and talents (Winasa, 2021). According to Rasyono (2019), playing is the most important element in children's daily lives to maintain happiness for children. The desire to move is accommodated through play to satisfy the children's needs (Basuki, 2017). Following this theory, underpassing technique is align with this theory. In essence, the ability to use basic passing techniques in volleyball games is provided through a scientific approach learning model, stimulating students to move and carry out the practice of underpassing actively (Hananingsih & Imran, 2020). As a result, the underpass ability of Mattayom students at the Vuttisat Vittanuson school increased by 28.153% from before (Irianto, 2018).

Providing a scientific approach improves basic passing techniques, as proven by the research that has been carried out. The results after being given a scientific approach have increased; this was proven by the test results of one of the students before being given the playing form. The pre-test with a score of 9 after being given treatment in the playing form increased with a post-test score of 15 (Mustafa & Winarno, 2020).

Underpassing is the most basic technique in Volleyball, which aims to provide a pass to a teammate. A team can play a good volleyball game with good underpassing technique skills. Various techniques are learned in training so that achievements can be achieved. Underpassing training with a scientific approach was chosen as the learning method, significantly increasing underpassing ability (Mashud, 2015). The scientific approach learning model stimulates students to move actively because they feel happy. Students unconsciously carry out underpassing movements, and it turns out that their



ability in underpassing techniques has increased after some time.

## CONCLUSION

The scientific approach provides a new paradigm in physical education learning, especially in the material of passing under Volleyball. Student's learning stages start from observing the passing learning process, asking questions based on findings from observations, practicing basic underpassing techniques with various variations and combinations, associating from various learning experiences the results of trying and communicating the results of underpassing learning by demonstrating in front of teachers and other students. Applying a scientific approach to learning volleyball underpassing has significantly contributed to Mattayom 5th-grade students at the Vuttisat Vitayanuson School, Koh Lanta Krabi, Thailand.

## REFERENCE

- Basuki, S. (2017). Pendekatan Saintifik Pada Penjasorkes Dalam Rangka Membentuk Jati Diri Peserta Didik. *Jurnal Pendidikan Jasmani Indonesia*, 12(2), 117–124. <https://doi.org/10.21831/jpji.v12i2.17111>
- Beutelstahl. (2005). *Belajar bermain bola volley*. Bandung: CV. Pionir Jaya.
- Burhanuddin, S., Syahrudin, S., Sahabuddin, S., & Majang, M. (2022). Pendekatan Saitifik Model Pembelajaran Kooperatif Untuk Meningkatkan Hasil Belajar Menggiring Bola. *Jambura Journal of Sports Coaching*, 4(2), 88–102. <https://doi.org/10.37311/jjsc.v4i2.15499>
- Dharmawan, D., Syafei, M. M., & Siswanto, S. (2023). Analisis Penerapan Pendekatan Saintifik pada Pembelajaran Pendidikan Jasmani Materi Teknik Dasar Passing Sepak Bola di SMP Negeri 1 Jatibarang. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, 6(1), 7–12. <https://doi.org/10.54371/jiip.v6i1.1376>
- Gozali, I. (2013). *Aplikasi Analisis Multivariate degan Program IBM SPSS 21*. Semarang: Badan Penerbit Universitas Diponegoro.
- Hananingsih, W., & Imran, A. (2020). Modul Berbasis Pendekatan Saintifik Dalam Pembelajaran Pendidikan Jasmani Olahraga Dan Kesehatan. *JUPE: Jurnal Pendidikan Mandala*, 5(6). <https://doi.org/10.58258/jupe.v5i6.1593>

- Hartanti, M. D., Rachman, A., & Tuasikal, S. (2020). Pengaruh Pembelajaran Sirkuit Berbasis Pendekatan Saintifik Terhadap Hasil Belajar Dribble dan Shooting Bola Basket. *MULTILATERAL: Jurnal Pendidikan Jasmani Dan Olahraga*, 19(2), 111–119.
- Hidayat, S., & Pulung Riyano, D. R. (2018). Pengaruh Metode Bermain Terhadap Peningkatan Passing Bawah Dalam Permainan Bola Voli Siswa Ekstrakurikuler Smk Negeri 1 Subang. *BIORM ATIKA Jurnal Ilmiah FKIP Universitas Subang*, 4(01).
- Irianto, T. (2018). Implementasi Kurikulum 2013 dalam Pembelajaran Pendidikan Jasmani Olahraga dan Kesehatan di Sekolah Dasar. *Jurnal Multilateral*, 13(1), 58–61.
- Machin, A. (2014). Implementasi pendekatan saintifik, penanaman karakter dan konservasi pada pembelajaran materi pertumbuhan. *Jurnal Pendidikan IPA Indonesia*, 3(1), 28–35. <https://doi.org/10.15294/jpii.v3i1.2898>
- Manik, A. C., & Sihotang, J. M. (2015). Penerapan Saintifik Melalui Gaya Mengajar Pemecahan Masalah Pada Passing Bawah Bola Voli. *Jurnal Pedagogik Olahraga*, 1(2), 57–68.
- Martono, H., Rahayu, T., & Artikel, S. (2017). Pengaruh Model Pembelajaran dan Jenis Kelamin terhadap Hasil Belajar Passing Bola Voli. *Journal of Physical Education and Sports H*, 6(1), 44–49. Retrieved from <http://journal.unnes.ac.id/sju/index.php/jpes>
- Mashud. (2015). Pendekatan pembelajaran pendidikan jasmani olahraga dan kesehatan di Era abad 21. *Jurnal Multilateral*, 14(2), 89–114.
- Mustafa, P. S., & Winarno, M. E. (2020). Penerapan Pendekatan Saintifik dalam Aktivitas Belajar Pendidikan Jasmani, Olahraga, dan Kesehatan di SMK Negeri 4 Malang. *Jurnal Penjakora*, 7(2), 78. <https://doi.org/10.23887/penjakora.v7i2.25633>
- Nugraha, T. (2017). Penerapan pendekatan ilmiah pada pelajaran pendidikan jasmani olahraga dan kesehatan dan dampaknya pada siswa SMA Negeri 15 Medan. *Pegagogik Olahraga*, 53(9), 1689–1699.
- Nurhasan. (2007). *Tes dan Pengukuran Olahraga*. Bandung: FPOK UPI.
- Pranopik, M. R. (2017). Pengembangan Variasi Latihan Smash Bola Voli. *Jurnal Prestasi*, 1(1), 31–33. <https://doi.org/10.24114/jp.v1i1.6495>
- Pratama, C. M. W., Hartati, H., & Waluyo, W. (2020). Pengembangan model pembelajaran passing bawah bola voli berbasis pendekatan saintifik. *Journal Of Sport Education (JOPE)*, 3(1), 14. <https://doi.org/10.31258/jope.3.1.14-25>
- Putra, Y. A., Sistiasih, V. S. (2021). *Modifikasi Pembelajaran Bola Voli*. 4(2), 126–133.
- Rasyono, R. (2019). Pengaruh Latihan Bola Pantul Terhadap Keterampilan Passing Bawah Bola Voli Pada Ekstrakurikuler Smp Negeri 30 Muaro Jambi. *Riyadhoh* :

*Jurnal Pendidikan Olahraga*, 2(1), 22. <https://doi.org/10.31602/rjpo.v2i1.2027>

- Samsudin, S., & Rahman, H. A. (2016). Pengaruh metode pembelajaran drill, bermain, dan kelincahan terhadap kemampuan passing dalam permainan bola voli. *Jurnal Keolahragaan*, 4(2), 207. <https://doi.org/10.21831/jk.v4i2.10899>
- Saputra, D. I. M., & Gusniar, G. (2019). Meningkatkan Hasil Belajar Passing Bawah Bola Voli melalui Bermain Melempar Bola. *Gelandang Olahraga: Jurnal Pendidikan Jasmani Dan Olahraga (JPJO)*, 3(1), 64–73. <https://doi.org/10.31539/fjpo.v3i1.862>
- Sugiyono. (2016). Metode Penelitian Ilmiah. *Metode Penelitian Ilmiah*, 84, 116.
- Widarto, Pardjono, & Widodo, N. (2012). Pengembangan model pembelajaran. *Cakrawala Pendidikan*, XXXI(3), 409–423.
- Winasa, I. P. (2021). Peningkatan Hasil Belajar Pendidikan Jasmani, Olahraga, dan Kesehatan (PJOK) Melalui Penerapan Pendekatan Saintifik Berbantuan Video Pembelajaran pada Masa Pandemi. *JIRA: Jurnal Inovasi Dan Riset Akademik*, 2(6), 804–812. <https://doi.org/10.47387/jira.v2i6.162>

# The Effectiveness of a Scientific Approach

## ORIGINALITY REPORT

17%

SIMILARITY INDEX

15%

INTERNET SOURCES

10%

PUBLICATIONS

3%

STUDENT PAPERS

## PRIMARY SOURCES

1	<a href="http://jurnal.univpgri-palembang.ac.id">jurnal.univpgri-palembang.ac.id</a> Internet Source	3%
2	<a href="http://e-journal.hamzanwadi.ac.id">e-journal.hamzanwadi.ac.id</a> Internet Source	1%
3	<a href="http://repository.unsri.ac.id">repository.unsri.ac.id</a> Internet Source	1%
4	<a href="http://e-journal.unair.ac.id">e-journal.unair.ac.id</a> Internet Source	1%
5	<a href="http://journal-center.litpam.com">journal-center.litpam.com</a> Internet Source	1%
6	<a href="http://educationdocbox.com">educationdocbox.com</a> Internet Source	1%
7	A. St. Aisyah Nur, Anwar Ramli, Mrs. Inanna, Andi Muhamad Iqbal Akbar Asfar, A. M. Irfan Taufan Asfar, Mrs. Ernawati. "ANALYSIS CURIOSITY AND ANALOGY ABILITIES OF COLLEGE STUDENT REVIEWED FROM A SCIENTIFIC APPROACH AT THE UNIVERSITY OF MUHAMMADIYAH BONE", JIRA: Jurnal Inovasi dan Riset Akademik, 2021	1%

---

8	Submitted to CSU, Long Beach Student Paper	1 %
9	<a href="http://krepublishers.com">krepublishers.com</a> Internet Source	1 %
10	<a href="http://123dok.com">123dok.com</a> Internet Source	<1 %
11	<a href="http://prezi.com">prezi.com</a> Internet Source	<1 %
12	Alper Karababa, Raşit Avcı. "Effect of the Self-Worth Strengthening Group Psycho-Education Program Based on Systemic Therapy on the Self-Worth of Emerging Adults", Contemporary Family Therapy, 2023 Publication	<1 %
13	<a href="http://www.int-jecse.net">www.int-jecse.net</a> Internet Source	<1 %
14	<a href="http://media.neliti.com">media.neliti.com</a> Internet Source	<1 %
15	<a href="http://repository.upi.edu">repository.upi.edu</a> Internet Source	<1 %
16	Zidan Dhia, Didi Suryadi, Y Touvan Juni Samodra, Mashud et al. "Assessing the influence of playing method on the outcome	<1 %

# of basketball shooting ability", Physical Culture, Recreation and Rehabilitation, 2023

Publication

17

[jse.rezkimedia.org](http://jse.rezkimedia.org)

Internet Source

<1 %

18

Rajidin Rajidin, Awang Roni Efendi, Henry Maksum. "Playing Method Application in Improving Students' Competence of Volleyball Under-Passing Technique", AL-ISHLAH: Jurnal Pendidikan, 2022

Publication

<1 %

19

[digilib.uinsgd.ac.id](http://digilib.uinsgd.ac.id)

Internet Source

<1 %

20

[ejournal.undiksha.ac.id](http://ejournal.undiksha.ac.id)

Internet Source

<1 %

21

[etheses.iainponorogo.ac.id](http://etheses.iainponorogo.ac.id)

Internet Source

<1 %

22

[journal.iistr.org](http://journal.iistr.org)

Internet Source

<1 %

23

[www.atlantis-press.com](http://www.atlantis-press.com)

Internet Source

<1 %

24

Deden Rahmat, Ribut Wahidi. "Pengaruh Pembelajaran Passing Berpasangan Terhadap Keterampilan Passing Bawah Dalam Permainan Bola Voli", JUARA : Jurnal Olahraga, 2018

<1 %

25

Oman Hadiana, Ribut Wahidi, Sartono Sartono, Boby Agustan, Gilang Ramadan. "Efektivitas penerapan video feedback (VFB) terhadap motivasi belajar pada pembelajaran futsal", Jurnal SPORTIF : Jurnal Penelitian Pembelajaran, 2020

Publication

---

<1 %

26

Siti Nurlelah, Heris Hendriana, Aflich Yusnita Fitrianna. "The Implementation of Scientific Approach to Increase Mathematical Problem Solving Ability on Junior High School Students", (JIML) JOURNAL OF INNOVATIVE MATHEMATICS LEARNING, 2023

Publication

---

<1 %

27

[repository.paramadina.ac.id](https://repository.paramadina.ac.id)  
Internet Source

---

<1 %

28

[repository.uir.ac.id](https://repository.uir.ac.id)  
Internet Source

---

<1 %

29

[repository.um-surabaya.ac.id](https://repository.um-surabaya.ac.id)  
Internet Source

---

<1 %

30

[sainsglobal.com](https://sainsglobal.com)  
Internet Source

---

<1 %

31

[www.hrpub.org](https://www.hrpub.org)  
Internet Source

---

<1 %

---

Exclude quotes Off

Exclude matches Off

Exclude bibliography On