13 (2) (2024) 311 - 319
Journal of Physical Education, Sport, Health and Recreations
https://journal.unnes.ac.id/journals/peshr

Effectiveness of Using Flip PDF Professional E-Book for Learning Sepak Takraw

Rizki Gustaman[1], Silvi Aryanti[2]✉, Herri Yusfi[3], Samsul Azhar[4]

Program Study of Physical Education and Health Sciences, Faculty of Teacher Training and Education, Universitas Sriwijaya, Palembang, Indonesia[124]
Program Study of Sport Education, Faculty of Teacher Training and Education, Universitas Sriwijaya, Palembang, Indonesia[3]

Article History

Received May 2024
Accepted June 2024
Published Vol.13 No.(2) 2024

Keywords:
Sepak Takraw; Effectiveness; Media e-book

Abstract

This study discusses the effectiveness of the use of e-books based on the flip pdf professional sepak takraw application for students of Palembang 6 Senior High School. This study aims to determine the effectiveness of using e-book media based on the flip pdf professional application for sepak takraw learning at Palembang Senior High School. The research method used in this research is Classroom Action Research using two cycles. The subjects in this study consisted of 36 students in class XI Senior High School. Data collection techniques used by conducting tests and observations carried out with several stages, namely: planning, implementation stage, observation stage, and reflection stage. The results of the research obtained in the pre-cycle with obtained classical completeness of 40.5% and obtained the average value of students of 57.6%, in pre-cycle I obtained the results of classical completeness of 56.8% with an average value of 62.8% and obtained results from pre-cycle II classical completeness of students of 86.4% with an average value obtained of 80%. From the results of the data obtained, it can be concluded that the application of the use of e-books based on the professional sepak takraw flip pdf application can be said to be effectively used in learning at Senior High School, South Sumatra.

How to Cite

Gustaman, R., Aryanti, S., Yusfi, H., & Azhar, S. (2024). Effectiveness of Using Flip PDF Professional E-Book for Learning Sepak Takraw. Journal of Physical Education, Sport, Health and Recreation, 13 (2), 311-319.

✉ Correspondence address :
E-mail: : silviaryanti@fkip.unsri.ac.id

p-ISSN 2460-724X
e-ISSN 2252-6773

INTRODUCTION

The Each country has its own unique way of implementing education. Indonesia's educational framework is rooted in the preamble of the 1945 Constitution of the Republic of Indonesia, which states "to educate the nation's life." Education is recognized as one of the key factors in enhancing the quality of human resources on Earth. Good human resource quality improves life on Earth, leading to higher productivity, while poor human resources can deteriorate life on Earth (Mustafa, 2022). Education is a conscious and planned effort to create a conducive learning environment and learning process so that students can actively develop their potential (Pristiwanti et al., 2022). Physical education is part of the curriculum designed to strengthen holistic competency in attitude, knowledge, and skills. The aim of physical education is not only to enhance competencies but also to impart knowledge about health and skills in sports. Motor skills, knowledge, and attitudes are developed through the process of physical education. Physical education fosters awareness of the importance of physical fitness and sports in life (Ginanjar et al., 2018).

The subject of Physical Education, Sports, and Health (PJOK) is one of the mandatory subjects in formal educational institutions. PJOK encompasses physical activities and the process of developing personality, both mentally and socially. It can be described as education aimed at the physical aspect, conducted through physical activities. The task of PJOK education is not only to focus on fostering physical education but also on cultivating attitudes and values through the learning process. The structured and goal-oriented arrangement of PJOK learning involves a structured process aligned with the desired objectives (Putri & Nurhayati, 2022).

Learning is a process for students using educational principles and learning theories. It is a crucial determinant of educational success, functioning as a two-way communication where teaching is conducted by the teacher as an educator, while learning is carried out by the students. Teaching activities should involve understanding the subject matter to help develop students' thinking skills and understand learning models, thereby stimulating their abilities. Learning is an activity designed to assist individuals in acquiring skills, aimed at enhancing thinking and problem-solving skills (Iswanto & Widayati, 2021).

The effectiveness of learning is a measure of the implementation or success of the learning communication process between students and educators, aimed at achieving learning objectives. Learning effectiveness can be observed through students' activities during the learning process. Effective teaching activities by educators can support an enjoyable learning process. Effectiveness is a structured combination of various elements, including materials, human resources, facilities, equipment, and procedures directed towards positively influencing students' behavior. It involves providing ample opportunities for independent learning or engaging students extensively in learning activities (Rohmawati, 2015)

"Sepak takraw," in Malay, "sepak" means to kick, while "takraw" refers to a woven ball. Essentially, sepak takraw means kicking a ball. It became officially known and developed in Indonesia around the 1970s. Sepak takraw is played by two teams, each consisting of three players and one substitute player (Purwanto et al., 2019). The game of sepak takraw not only has elements of sport but also elements of art and has various techniques and variations in playing sepak takraw such as sepak sila, sepak kura, thigh kicks, playing using the head, chest and other body parts. This game is sometimes accompanied by the sound of gongs and drums (Iyakrus, 2017). The sport sepak takraw is a competitive sport played by 3 people per team which is played on a field measuring 13.40 m long x 6.10 m wide and a net height of 145-155 cm (Hanif et al., 2015).

Based on the research by Aryanti et al., (2022), a research product was produced, an E-book for learning sepak takraw based on the Flip PDF Professional application, validated for university students. E-book-based learning facilitates access to lessons anytime, anywhere, allowing students to access the system whenever they want, without restrictions on learning hours or location. Learning through e-books helps in understanding difficult material, making learning more interactive, and multimedia learning materials are suitable tools for education (Zahara et al., 2017).

Referring to the research conducted by Aryanti et al., (2022), the research problem aims to determine the effectiveness of using the Flip PDF Professional-based E-book application for sepak takraw among students. Basic sepak takraw techniques have been taught previously, mainly through books, rarely using e-book-based media. Hence, the need for e-book-based learning with basic sepak takraw technique materials arose, but the effectiveness of applying e-book-based media for sepak takraw technique materials is yet to be known. Therefore, this research investigates the effectiveness of such learning models. Conside-

ring the existing problem background, effectiveness testing of this learning model is necessary, leading to research entitled "The Effectiveness of Using Flip PDF Professional-based E-book for Sepak Takraw among Students."

METHODS

This This study employs the Classroom Action Research (CAR) method. CAR is an evaluative effort within the classroom learning environment (Udil, 2021). It is a systematic endeavor by teachers to analyze various problems and challenges within the learning process and find effective alternative solutions to enhance the quality of teaching activities. According to Arikunto, (2017), CAR describes the activities of an action, including its causes and effects, and explains the process from the initial action to its consequences on the subjects involved.

The aim of CAR is to improve and enhance classroom learning activities. It is conducted conditionally and situationally, aiming to provide innovative, creative, and effective learning activities (Azizah, 2021). The CAR employed in this study utilizes an initial test (Pre-cycle), followed by Cycle I after the Pre-cycle phase to gather further information. After implementing Cycle I and obtaining results and reflections, the study proceeds to Cycle II. The success of the classroom action research can be determined by observing positive changes after the implementation of the learning action or by achieving predefined success criteria.

In this research, the data source consists of students from Palembang 6 Public Senior High School in class XI 7. The procedure of Classroom Action Research includes the Pre-cycle test, which serves as an orientation phase before the researcher conducts the actual Classroom Action Research. The Pre-cycle activity is conducted to gather information about the situation before implementing Cycle I and Cycle II. The Pre-cycle test focuses on observing student engagement, teacher performance, and student learning outcomes using a set of 20 questions.

The data analysis technique for this Classroom Action Research is conducted to assess the effectiveness of implementing the Flip PDF Professional-based e-book media on sepak takraw materials. Learning Mastery Assessment The formula used to calculate the percentage of learning mastery is as follows:

Percentage of student completion = (Number of Students who completed/ Total Number of Students) X 100%

Table 1. Criteria for Students' Learning Success in Percentage

Success Rate in Percent (%)	Meaning
≥ 80%	Very High
75 – 79%	High
55 – 74%	Moderate
20 – 54%	Low
≤ 20	Very Low

Source: (Aqib, dkk. 2019)

The data collected during each observation or monitoring of the implementation of each cycle is used to determine the observation or monitoring results of the students. To calculate the average percentage of student engagement in the classroom, the following formula is used:

Student act Score = (Score obtained/Max Score) × 100%

To calculate the average percentage of student activity in class, use the formula:

Average student act = (Nm/Number of descriptor results) × 100%

Information:
Nm = Number of all items checked
n = Number of Students

Table 2. Observation Success Level Criteria

Interval	Activity Category
81 – 100	Very Active
61 – 80	Active
41 – 60	Quite Active
21 – 40	Less Active
≤ 20	Not Active

Source: (Chotibuddin., 2018).

RESULTS AND DISCUSSION

Pre-cycle Test

The pre-cycle (pre-test) was conducted on January 17, 2023. In conducting the Classroom Action Research (CAR), the researcher must first carry out initial observations or conduct a pre-cycle (pre-test). The pre-test is conducted before implementing Cycle I and II actions, aiming to assess the students' level of understanding in the classroom. Observations were conducted in class XI 7 at Palembang 6 Public Senior High School, Palembang. The pre-cycle was conducted inside the classroom, observing student engagement, teacher delivery of learning materials, and student learning outcomes.

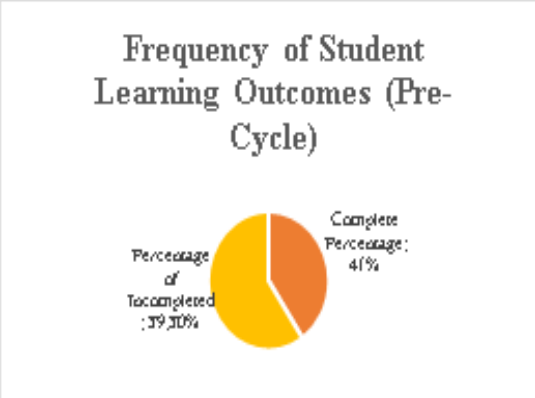


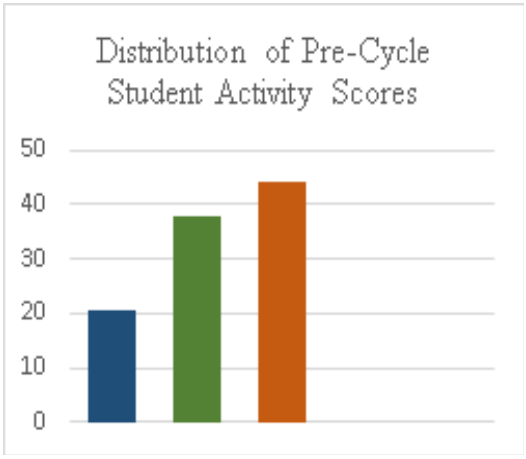
Diagram 1. Frequency of Student Learning Outcomes (Pre-Cycle)

Tabel 3. Frequency of Student Learning Outcomes (Pre-Cycle) Results

Value	F	Percentage	Information
≥ 60-100	15	40,5 %	Completed
< 60	22	59,5 %	Incompleted
Amount	37	100%	

In the **Tabel 3** above, it can be seen that there were 37 students in the initial test (pre-cycle) in the complete category, namely 15 with a percentage obtained of 40.5%. As for students in the incomplete category, namely 22 with a percentage of 59.5%, they can be categorized as still low.

The observations carried out are observations of the learning activities carried out by students during the pre-cycle. The observations carried out were using observation sheets that had been provided previously. The values for student activity in the pre-cycle were:



Graph 1. Distribution of Pre-Cycle Student Activity Scores

Based on the **Graph 1** above, it can be said that out of the total number of 37 students, there are 7 students who are in the very active category, for the active category there are 12 students, for the moderately active category there are 18 students, while for the less active category and inactive 0 students. From the results obtained, it can be concluded that the activity level of students in the Pre-cycle is quite active.

Cycle I Action

The Classroom Action Research (CAR) at Palembang 6 Public Senior High School, South Sumatra, took place from January 24 to February 7, 2024, in the academic year 2023-2024, conducted in class XI 7. The research subjects consisted of 37 students, comprising 12 males and 25 females. This research involved several cycles, starting with Cycle I and followed by Cycle II if the success criteria were not met based on the set standards. The CAR, which had been previously conducted, led the researcher to discuss the implementation of Cycle I with the Physical Education teacher at Palembang 6 Public Senior High School, Mr. Egi Pangestu. After the discussion, the researcher and the Physical Education teacher implemented the research stages as follows:

Planning Stage

This planning stage involved several steps to prepare for Cycle I:

- Preparing the teaching module
- Analyzing the curriculum used at Palembang 6 Public Senior High School
- Preparing the learning materials
- Preparing the appropriate teaching media
- Preparing observation sheets to monitor student learning progress.

Implementation Stage

The implementation of Cycle I took place on January 24, 2024, in class XI 7 at Palembang 6 Public Senior High School. During this session, the learning materials aligned with the Core Competencies (KI) and Basic Competencies (KD) were explained. The learning activities were conducted by the Physical Education teacher with assistance from the researcher. The stages of Cycle I, according to the prepared module, were as follows:

Introduction Activity

The learning activity took place on Wednesday, starting from 08:00 to 10:00 AM. The first activity involved a collective prayer led by the class representative before commencing the learning session. Following the prayer, the teacher took attendance, and then both the teacher and the researcher, assisted by students, prepared the necessary materials for the learning

activities. Subsequently, the teacher and the researcher explained the objectives of the learning activities.

Core Activity

During the core activity, the teacher and the researcher delivered the learning objectives, followed by providing stimuli to the students to focus their attention on the upcoming topic of sepak takraw. Then, the teacher, assisted by the researcher, explained the material gradually, starting from the basics of sepak takraw. The teacher then directed the students' attention to the projector prepared for learning the effectiveness of using the Flip PDF Professional-based e-book for sepak takraw. Within the application, the learning material about sepak takraw was provided, and the teacher, with assistance from the researcher, explained and demonstrated the movements to be taught to the students. A question and answer session followed, where the teacher and the researcher provided an opportunity for students to ask questions if they did not understand or needed clarification on the presented material. Additionally, the students were given 20 prepared questions by the researcher to answer after the material discussion conducted by the teacher and the researcher.

Closing Activity

In the closing activity, the teacher and the students summarized the learning material covered, and the teacher explained the upcoming learning activities for the next meeting. Finally, the learning session concluded with a prayer led by the teacher and the students.

Observation Stage

Student Learning Outcomes (Cycle I)

The researcher conducted Cycle I actions, followed by administering a 20-question multiple-choice test. The table below shows the learning outcomes of the students in Cycle I:

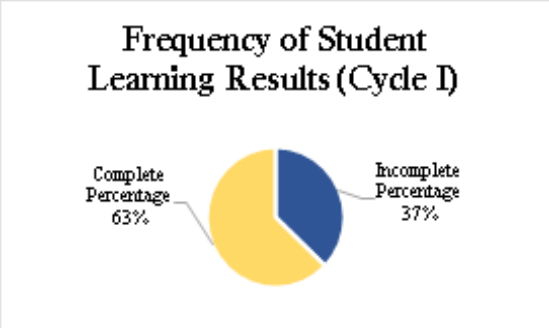
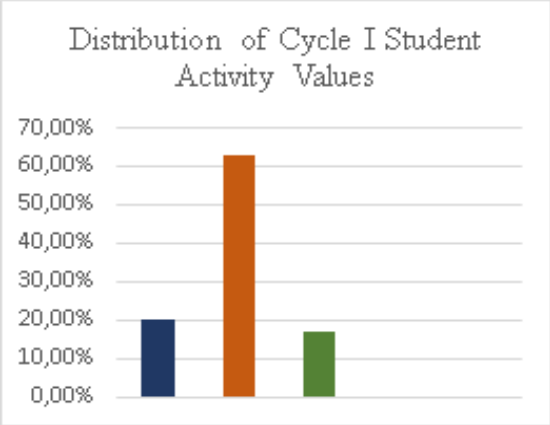


Diagram 2. Frequency of Student Learning Results (Cycle I)

Based on the learning outcomes of the students during Cycle I, it can be observed that in class XI 7 at Palembang 6 Public Senior High School, the highest score obtained by a student was 80, while the lowest score was 40. The average score was 62.8%. Out of the total 37 students, 21 students met the criteria for mastery, with a mastery rate of 56.8%, while 16 students did not meet the criteria, with a rate of 43.2%. Therefore, it can be concluded that the learning activities during Cycle I can be considered unsuccessful as the success indicator of 80% was not achieved. Hence, improvements are needed in Cycle II to achieve the set success indicator of 80%.

Student Learning Activities

The observation conducted aimed to observe the learning activities carried out by the students during the implementation of Cycle I. The observation was conducted using observation sheets prepared in advance. The results of the distribution of student activity scores during Cycle I are as follows:



Graph 1. Distribution of Cycle I Student Activity Values

Based on the results from the table above, it can be seen that of the 37 students, 9 students were in the very active category, 21 students were in the active category, 7 students were in the moderately active category and 0 students were in the less active and inactive categories. So it can be concluded that the level of student activity in cycle I activities falls into the active category.

Reflection on Cycle I

Following the implementation of Cycle I, the researcher and the PE teacher will conduct a reflection session on the learning activities conducted during Cycle I. The purpose of this reflection is to evaluate the actions taken during Cycle I and determine which actions will be implemented during Cycle II. The reflection aims to assess the effectiveness of Cycle I and identify areas for improvement in Cycle II.

The learning outcomes of Cycle I were

assessed by administering a multiple-choice test consisting of 20 questions. The classical mastery of students achieved 62.8%, while the percentage of students who achieved mastery in learning outcomes reached 56.8%. Out of the total 37 students, 21 students met the criteria for mastery, while 16 students did not. The material covered during Cycle I, which utilized the effective use of e-book-based learning using the flip pdf professional application for sepak takraw, revealed that some students still struggled to understand certain aspects due to insufficient instruction on sepak takraw.

Several challenges were encountered during the implementation of Cycle I, including some students' lack of attention during explanations and practice sessions, their low activity levels during learning activities, and their reluctance to ask questions about unfamiliar topics. Based on the analysis of Cycle I, it is necessary to proceed with Cycle II as some students did not achieve the minimum passing grade. Therefore, in Cycle II, corrective actions will be implemented, including providing verbal reinforcement to students and conducting practical demonstrations to facilitate better understanding of the sepak takraw material.

Cycle II

The Classroom Action Research (CAR) at Palembang 6 Public Senior High School, South Sumatra, will be conducted during the second semester from January 22nd to February 7th, 2024, in the academic year 2023-2024, involving class XI 7. The research will consist of several cycles, starting with Cycle I and followed by Cycle II. If the success criteria are not met based on the established standards, the research will proceed to Cycle III.

The subsequent Classroom Action Research will involve discussions between the researcher and the PE teacher at Palembang 6 Public Senior High School, Mr. Egi Pangestu, to determine the implementation of Cycle II. After the discussion, the researcher and the PE teacher will proceed with the following steps:

Planning Phase

The planning phase involves several steps necessary for implementing Cycle II, including: 1) preparing the teaching modules, 2) analyzing the curriculum used at Palembang 6 Public Senior High School, 3) preparing the learning materials, 4) preparing the appropriate learning media, and 5) preparing observation sheets to assess student learning outcomes. During the planning phase for Cycle II, improvements will be made based on the reflections from Cycle I.

Implementation Phase

The implementation phase of the Classroom Action Research activities for Cycle II will take place on January 31st, 2024, in class XI 7 at Palembang 6 Public Senior High School. During the session, the learning materials will be explained in accordance with the Core Competencies (KI) and Basic Competencies (KD). The learning activities will be conducted by the PE teacher with assistance from the researcher. The following steps will be carried out during Cycle II in accordance with the prepared teaching module:

Introduction Activity

The learning activities will commence on Wednesday from 08:00 to 10:00. At the beginning of the session, students will participate in a group prayer led by the class leader. Following the prayer, the teacher will take attendance, and then both the teacher and the researcher, assisted by the students, will prepare the necessary materials for the learning activities. Subsequently, the teacher, with assistance from the researcher, will initiate the learning activities by asking students about their experiences, followed by an explanation of the learning objectives.

Core Activity

The educator communicates and explains the learning objectives to the students. The educator provides stimuli to encourage students to focus more on the sepak takraw material. Students are asked to observe the sepak takraw material presented in the e-book application using flip pdf professional, which has been prepared in advance by the researcher and the teacher, utilizing mobile phones (HP) and a projector. While the material is displayed and read, the teacher and the researcher occasionally demonstrate basic sepak takraw movements directly to help students better understand. Afterward, students are asked to practice these basic sepak takraw movements. Then, the teacher and the researcher provide students with the opportunity to ask questions about the material discussed. Subsequently, the teacher and the researcher administer 20 multiple-choice questions to assess students' learning outcomes in the classroom.

Conclusion

In the closing activity, the teacher and the students summarize the learning material covered, and the teacher provides an explanation of the next learning session. Finally, a prayer and farewell are conducted to conclude the learning activity.

Observation Phase

Student Learning Outcomes (Cycle II)

During Cycle II, the researcher administers 20 multiple-choice questions to assess student learning outcomes. The table below presents the results of student learning outcomes in Cycle II:

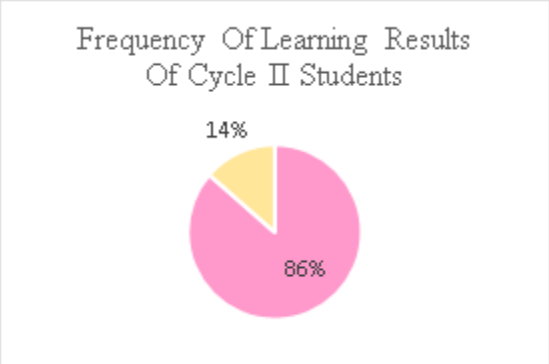


Diagram 3. Frequency of Cycle II Student Learning

Based on the results of students' learning activities during the second cycle of action, it can be seen that the results of class There were 32 students who got the complete score and category with a completion percentage of 86.4% and those in the incomplete category were 5 students with a percentage of 13.6%. So with this it can be concluded that the results of the action activities in cycle II can be said to be successful because they have reached the success indicator that has been set at 80% with the results of the student learning percentage in cycle II being 86.4%. So from these results there is no need to continue the actions in cycle III.

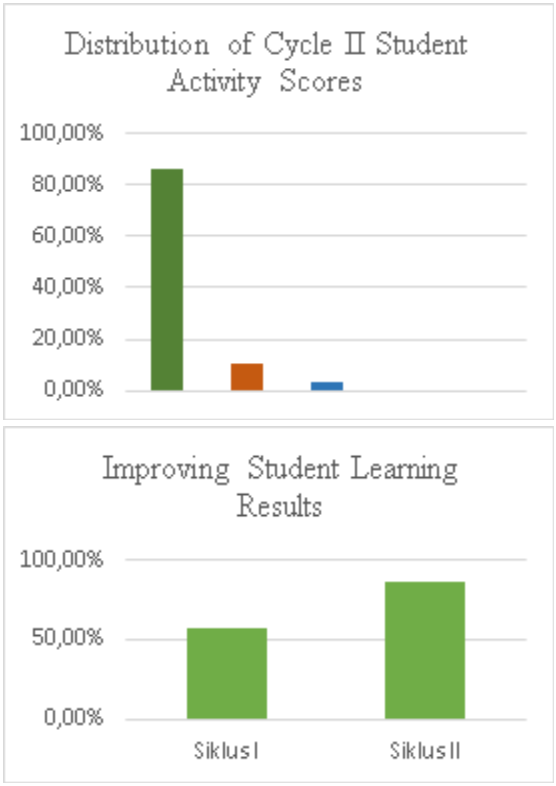
Student Learning Activities

During the implementation of Cycle II, observations were conducted to observe the activities carried out by the students, using prepared observation sheets. The distribution of student activity scores in Cycle II is as follows:

Based on the picture of the distribution of student activity scores in cycle II, it can be said that of the total number of students there were 37, 32 students got the very active category, 3 students got the active category and 2 students got the quite active category, and 0 students students who get the less active and inactive categories. From the data obtained, it can be concluded that in cycle II learning activities students were included in the very active category.

Reflection on Cycle II

The learning outcomes achieved by the students in Cycle II reached an average score of 80%, with a mastery level of 86.4%, and an average activity level of 75%. Therefore, it can be concluded that in the implementation of Cycle II, these achievements have exceeded the minimum mastery criteria (KKM) at Palembang 6 Public Senior High School for physical education subjects. With the overall mastery standard set at 65 and achieving 80%, this indicates that the use of e-book media based on the Flip PDF professional application for sepak takraw has proven to be effective in the learning process. Hence, there is no need for the researcher to continue to the next cycle as Cycle II has proven to be successful and effective in improving student learning results.



Graph 3. Improving Student Learning Results

This study aims to examine the effectiveness of learning using e-books based on the Flip PDF Professional application for sepak takraw. Classroom Action Research (CAR) is the method used in this research. According to Arikunto, (2017), Classroom Action Research is a research method that explains the activities of an action so that the causes and effects occur, and explains the process from the beginning of the action to the occurrence of the impact of the action given to the subject of the action. Various interesting findings were found in the context of this research.

From the evaluation of student learning, there is an improvement in performance from the pre-cycle stage to cycle I, and then from cycle I to cycle II. Thus, overall, there is a significant improvement in student learning outcomes dur-

ing the pre-cycle, cycle I, and cycle II stages, indicating the effectiveness of learning. The use of e-books based on the Flip PDF Professional application serves as an indicator of success in improving student learning outcomes, providing positive benefits for the quality of learning. According to Febrianti, (2021), e-books based on the Flip PDF Professional application have advantages like printed books that can be flipped, making them more engaging to use. This is because there are animations and videos that support the learning material, and can create multimedia illustrations, making it an interactive learning medium.

The results of observations at each cycle stage indicate that motivation has a significant influence on achieving learning success. The use of e-books based on the Flip PDF Professional application makes students more active, prevents boredom, and enhances the effectiveness of learning by allowing students to understand the material conveyed through the Flip PDF Professional application more quickly. This, of course, can be achieved by maintaining a balance between practical activities conducted by the teacher during the learning process.

According to Makdi, (2020), E-books are designed using interactive language to help students choose the topics they want to access. E-books are designed similarly to books, making it easier for students to learn the learning material. E-books are expected to be a media used in distance learning. In simple terms, eBooks can be interpreted as electronic books or digital books. Electronic books are digital versions of books which generally consist of a collection of paper containing text or images. The eBook itself turns the text and images into digital information in plain text, PDF, JPEG, Lit and HTML formats (Rifaldi et al., 2017).

In the pre-cycle, the classical mastery was 40.5% with an average score of 57.5%; cycle I reached 62.8%, and cycle II achieved a classical mastery of 86.4% with an average score of 80%. There was a significant improvement in student learning outcomes. Observations show an increase in student activity: pre-cycle 37.8% were moderately active, cycle I 62.8% were active, and cycle II 86.4% were highly active.

In conclusion, the results of the actions taken in each cycle show that the use of e-books based on the Flip PDF Professional application in delivering sepak takraw material is effective in improving student learning outcomes and their participation in teaching and learning activities in the classroom. The use of e-book-based applications like Flip PDF Professional for learning has proven to be very useful and effective, improving student achievement, learning efficiency, and preventing student boredness.

CONCLUSION

In conclusion, the results of the actions taken in each cycle show that the use of e-books based on the flip pdf professional application in delivering sepak takraw material is effective in improving student learning outcomes and their participation in teaching and learning activities in the classroom.

REFERENCES

Arikunto, S. (2017). Penelitian Tindakan Kelas (Rev.ed). Jakarta : Bumi Aksara. https://books.google.co.id/books/about/Penelitian_Tindakan_Kelas.html?id=-RwmEAAAQBAJ&redir_esc=y

Aryanti, S., Novritika, N., Fitriana, F., Destriana, D., Azhar, S., Nurpajriwati, N., & Anisa, Y. (2022). Small Scale Trials: Implementation of Mobile Learning Applications for Badminton Materials. Altius: Jurnal Ilmu Olahraga Dan Kesehatan, 11(2), 311–318. https://doi.org/10.36706/altius.v11i2.19911

Azizah, A. (2021). Pentingnya penelitian tindakan kelas bagi guru dalam pembelajaran. Auladuna: Jurnal Prodi Pendidikan Guru Madrasah Ibtidaiyah, 3(1), 15–22. https://doi.org/10.36835/au.v3i1.475

Chotibuddin., Z. A. & M. (2018). Teori dan Aplikasi Penelitian Tindakan Kelas: (PTK). Deepublish. https://books.google.co.id/books/about/Teori_dan_Aplikasi_Penelitian_Tindakan_K.html?id=F8-HDwAAQBAJ&redir_esc=y

Febrianti, F. A. (2021). Pengembangan Digital Book Berbasis Flip PDF Professional untuk Meningkatkan Kemampuan Literasi Sains Siswa. Caruban: Jurnal Ilmiah Ilmu Pendidikan Dasar, 4(2), 102–115. http://dx.doi.org/10.33603/caruban.v4i2.5354

Ginanjar, A., Suherman, A., & Tite Juliantine, Y. H. (2018). Development Of Indonesia Scientific Publications On Physical Education In Reputable International Journals: A Bibliometric Analysis. Pendidikan Jasmani Olahraga, 3(1), 122–128.

Hanif, A. S., Hakim, A. A., Or, S., Or, M., & Basyiruddin, B. (2015). Kepelatihan dasar sepak takraw. PT. RajaGrafindo Persada-Rajawali Pers. Long-Term Athlete Development Sepaktakraw - Prof. Dr. Achmad Sofyan Hanif, M.Pd., Dr. Abdul Aziz Hakim, S.Or,. M.Or., Burhan Basyiruddin - Google Buku

Iswanto, A., & Widayati, E. (2021). Pembelajaran pendidikan jasmani yang efektif dan berkualitas.

MAJORA: Majalah Ilmiah Olahraga, 27(1), 13–17. https://journal.uny.ac.id/index.php/majora

Iyakrus, I. (2017). Sejarah sepak takraw Sumatera Selatan. Altius: Jurnal Ilmu Olahraga Dan Kesehatan, 6(1). https://doi.org/10.36706/altius.v6i1.8224

Makdis, N. (2020). Penggunaan e-book pad era digital. Al-Maktabah, 19, Pp, 77–78. 10.58794/jekin.v3i1.484

Mustafa, P. S. (2022). Peran pendidikan jasmani untuk mewujudkan tujuan pendidikan nasional. Jurnal Ilmiah Wahana Pendidikan, 8(9), 68–80.

Pristiwanti, D., Badariah, B., Hidayat, S., & Dewi, R. S. (2022). Pengertian pendidikan. Jurnal Pendidikan Dan Konseling (JPDK), 4(6), 7911–7915. https://doi.org/10.31004/jpdk.v4i6.9498

Purwanto, A., Asbari, M., & Santoso, P. B. (2019). Pengaruh Kompetensi, Motivasi, Kepemimpinan, Komitmen dan Budaya Kerja Sistem Manajemen Integrasi ISO 9001, ISO 14000 dan ISO 45001 Pada Industri Otomotif. Jurnal Produktivitas: Jurnal Fakultas Ekonomi Universitas Muhammadiyah Pontianak, 6(2). http://dx.doi.org/10.29406/jpr.v6i2.1798

Putri, R. A., & Nurhayati, F. (2022). Jurnal Pendidikan Olahraga Dan Kesehatan Volume 10 Nomor 01 Tahun 2022. Jurnal Pendidikan Olahraga Dan Kesehatan, 10, 7–11. https://ejournal.unesa.ac.id/index.php/jurnal-pendidikan-jasmani/article/view/45841

Rifaldi, E., Aji, P., & Aditya, B. R. (2017). Aplikasi Android untuk Berbagi Ebook di Lingkungan Telkom University. EProceedings of Applied Science, 3(2). https://openlibrarypublications.telkomuniversity.ac.id/index.php/applied-science/article/view/3937

Rohmawati, A. (2015). Efektivitas pembelajaran. Jurnal Pendidikan Usia Dini, 9(1), 15–32. https://doi.org/10.21009/JPUD.091.02

Udil, P. A. (2021). Pelatihan penulisan artikel ilmiah penelitian tindakan kelas untuk publikasi pada jurnal iIlmiah. Jurnal Nasional Pengabdian Masyarakat, 2(1), 21–27. https://doi.org/10.47747/pengabdiankepadamasyarakat.v2i1.257

Zahara, N., Djufri, D., & Sarong, M. A. (2017). Optimalisasi pembelajaran dengan E-Book dan media pembelajaran berbasis multimedia untuk meningkatkan hasil belajar siswa kelas X SMA pada materi dunia tumbuhan. BIOTIK: Jurnal Ilmiah Biologi Teknologi Dan Kependidikan, 2(2), 105–109. http://dx.doi.org/10.22373/biotik.v2i2.243.