

**Analysis of The Need for Video-Based Volleyball Learning Media for High School Students****Amelia Agustina<sup>1</sup>, Silvi Aryanti<sup>2✉</sup>, Herri Yusfi<sup>3</sup>, Samsul Azhar<sup>4</sup>**Pendidikan Jasmani, Kesehatan dan Rekreasi <sup>124</sup>, Pendidikan Olahraga<sup>3</sup>,  
Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sriwijaya, Palembang 30128, Indonesia<sup>1234</sup>**Article History**Received January 2024  
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The aim of this research is to analyze the need for the use of learning media in the form of video-based learning media at Senior High School Number 8 Palembang. This research uses quantitative descriptive research and is a form of survey method. The sample for this research was 88 class X students. The data collection technique used was observation and filling out questionnaires. The results of this research obtained a percentage of 95.3% in the Physical Education subject. The results of the analysis of the need for learning media in the form of videos show that in Senior High School number 8 Palembang it is very necessary. The implication of this research is that some teachers find it difficult to create educational materials, so they rarely use media to teach their students and only rely on outdated materials such as explanations and illustrations. Therefore, learning media is needed in the form of learning videos that can make it easier for teachers and students to understand volleyball learning material. The research indicate that a study of students' requirements for the usage of video-based learning materials, especially in Physical Education subjects, is absolutely essential.

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✉ Correspondence address :  
E-mail: [silviaryanti@fkip.unsri.ac.id](mailto:silviaryanti@fkip.unsri.ac.id)

## INTRODUCTION

Education cannot be separated from a system. The components of the educational activity system are as follows: teachers, students, learning objectives, learning resources, and the learning environment. Each element that comprises the educational system is related to the others, depends on them, and influences them mutually. Every element serves a specific purpose to meet learning objectives. The successful execution of educational activities is contingent upon the assistance provided by the aforementioned components. The true purpose of education is to supply the infrastructure needed to make educational activities functional from a structural and institutional standpoint. In terms of structure, it necessitates the establishment of an administrative framework that governs the path of education. From an institutional perspective, it means that the learning process that takes place inside the framework of the organization is formalized in order to guarantee that it proceeds steadily and continuously in accordance with human needs and development, which leads to the development of human potential (Sulaiman, 2015). The goal of education is for students and teachers to learn together in order to gain knowledge, the opportunity to grow as individuals, and the ability to acquire new values.

(Aryanti et al., 2022) Learning is a process carried out to gain knowledge. Learning is communication to convey thoughts or ideas from the teacher to students which are processed in such a way, so that students gain understanding and skills from the thoughts that have been given. According to (Aryanti et al., 2017) selecting appropriate learning techniques is very necessary to improve student learning outcomes. Learning techniques in their application are carried out according to student needs. This is because each learning technique has different goals, principles and pressures. Choosing the right development of learning techniques can help convey messages correctly, effectively, efficiently, can create and enrich learning experiences, present a picture of an event as close or as real as possible, and can increase student activity and skills. In this delivery, a medium is needed so that the message conveyed is in accordance with the planned learning objectives. Media utilization plays a significant part in the educational process. Learning media are tools that aid in the teaching and learning process and help to clarify the message's meaning so that you can more effectively and precisely meet your learning goals. The role of media in the teaching and

learning process really helps teachers in supporting the successful achievement of learning objectives. The existence of learning media can raise students' learning motivation and enable students to learn independently according to their abilities wherever and whenever (Kuswanto, 2019).

In order to meet specific learning objectives, learning media can be used as a conduit or middleman to direct messages from learning materials to pique learners' (students') interest, attention, and feelings during learning activities. (Wisada et al., 2019). Video is one of the many different kinds of learning media available. Learning videos can help teachers in delivering material.

The use of learning media such as visual media or images, videos, CD and other media is among the elements that aid in the process of learning. (Ar-Rahman et al., 2021). Video media is everything that involves materials (software) and hardware/tools (hardware), namely objects that can be seen, heard or touched with the five senses, The focus of learning video media is on audio and visuals that can be used to teach content from learning resources to learners (individuals or groups). These tools can also be used to capture, process, and reorganize verbal or visual information in order to improve the effectiveness of the learning process both inside and outside of the classroom. (Maya & Siagian, 2013). Teachers now have an alternative in the form of learning media in the form of videos, which facilitates the easier delivery of lesson content to students, as well as the ability for students to repeat lessons at any time and place. The capacity to visualize content that students cannot see or imagine is a key function of animated videos as a teaching tool. Teachers can more easily convey material when using animated video learning materials. It is envisaged that the use of audiovisual materials will enable the creation of interactive learning environments, fun so that it influences the learning outcomes of high school students' service material, as well as having broad insight and knowledge in learning.

Physical education is a subject taught at the elementary, middle, and high school education levels. The goal of physical education is to teach students through exercise how to be more physically fit, develop motor skills, sportsmanship, emotional intelligence, knowledge, and healthy lifestyle choices. (Aryanti et al., 2021). Research by (Pambudi, M. E. Winarno, 2020) states that Physical Education is part of the overall educational process, where the aim is to improve human performance through physical activities to

develop and maintain the human body. The results of research by (Koc, 2017) say that Physical Education subjects have a positive effect on learning activities at school which greatly influences student development. Apart from that, according to (Wang, 2017), Physical Education has a big impact on moral character development, intellectual growth, artistic achievement, and leading a healthy lifestyle. The process of teaching through physical activity is known as physical education. One of the teaching materials in the physical education program is a big ball game of volleyball, which is included in the junior high school curriculum studied.

The game of volleyball consists of two teams, each consisting of six players, competing in a game of volleyball on one court separated by a net. The goal of the game is to knock the ball into the opponent's court to get points. (Yusfi, H, Sastra, I., Sukirno, S., 2019). Volleyball is a team game played by six players on the court and six reserve players. Volleyball is also a type of popular sport that is fun, interesting, and doesn't require a lot of money to play. Volleyball games can be played on or off the court. Volleyball is a form of game that is included in the sport, volleyball means a direct hit or hitting the ball directly in the air before the ball falls to the ground (Rukmana et al., 2021). The development of information and communication technology has brought about significant changes in the advancement of education. Learning processes, learning media, and individual learning strategies have all undergone significant development in tandem with these advancements in learning methods. An invention that has significantly impacted the way that learning has changed. Students now engage in a variety of activities in addition to listening to teachers describe the material; these activities include doing, observing, and demonstrating. Numerous applications of information and communication technology are already in use in society and are just waiting to be fully exploited for educational objectives. Information and communication technology will serve as a knowledge base, instructional aids, facilities, competency standards, administrative support, tools for managing schools, and educational infrastructure in the real world. (Achmad Yuhdi, 2016).

The use of learning technology is one of the skills that must be developed in the world of education. The effectiveness of a nation's development is contingent upon the caliber of its national education system, which in turn is determined by its teachers. Because, in this case, teachers can give a new color to the new innovations they pro-

vide in the world of education. A teaching and learning process that stimulates student interest and motivation. The use of appropriate teaching technology can have a positive effect in increasing students' learning motivation, but if teaching technology is not used well, the opposite will happen, preventing students from advancing into the world of technology. Therefore, it is self-evident that the use of learning technology is a supporting tool that can influence learning motivation (Mochamad Ridwan, Kolektus Oky Ristanto, I Dewa Made Aryanandha, Eva Ferdita Yuhantini, 2020). Therefore, application-based media is needed.

Based on observations in the field during volleyball lessons at Senior High School Number, it was found that the teacher in presenting theoretical material only used words accompanied by explanations. This causes learning to become monotonous, interaction during learning does not occur well. The learning media used is presented in the form of images.

According to (Aryanti et al., 2021) According to their research, the availability of instructional videos can improve students' comprehension of the subject matter as well as their activity and skill levels. (Sarnoko, 2016) states that video as a learning medium has a positive contribution to student learning outcomes. More opinions from (Aryanti, 2020) Utilizing advances in information and communication technology especially computer technology in learning activities are expected to help solve the learning problems faced. The choice of the right media is believed to help deliver messages correctly, effectively, efficiently, can create and enrich learning experiences, able to present a picture of an event as close or as real as possible, and able to improve student activity and skills.

With animated video media, it is hoped that learning in class will not be boring and students' interest in learning can increase. In other words, the teaching and learning process becomes more varied and enjoyable. This is consistent with the traits of energetic, play-loving high school students. It will be easier if learning information is transmitted through the right media.

Based on these problems, the researcher plans to develop animated video media for volleyball game material to support teaching and learning activities at Elementary School Negeri 8 Palembang. Researchers hope to create engaging learning materials in the form of animated videos based on this. The aim of developing this animated video media is to help children better understand subjects and optimize student lear-

ning outcomes.”

## METHODS

This research employs a quantitative descriptive research using a survey method aims to describe and present current occurrences, systematically narrate existing problem-solving methods, and provide accurate and factual insights based on data concerning specific characteristics or factors under investigation. The objective of descriptive research is systematic and factual problem-solving regarding the facts and characteristics of the population. Data collection in this study involves the use of questionnaires, observations, and interviews. A sample is a subset of the population with characteristics representing the entire population, chosen in a comprehensive manner or representative, as stated by Sugiono (2020: 81). According to Sugiyono (2014), when the population is large, and studying everything in the population is not feasible due to limitations in funds, personnel, and time, researchers can use a sample taken from that population. In this research, sample determination utilizes purposive sampling, a technique based on specific considerations. The consideration for this study is 30 sixth-grade students from State Senior High School 184 Palembang.

## RESULTS AND DISCUSSION

The data collected is the results of a questionnaire analyzing the need for learning media. The results of the needs analysis obtained by filling out a questionnaire via Google Form were filled in by class X students at Senior High School Number 8 Palembang with a total number of respondents being 88 students. The purpose of analyzing the need for learning media is to support learning and to find out which media researchers will develop in accordance with existing learning needs in the field. **Table 1** displays the answers to the questionnaire that by 88 students filled out.

**Table 1.** Analysis of Video-Based Learning Media Requirements

Question	Answer	Percentage
Is volleyball learning video media a necessary learning tool for students?	Yes	95,3%
	No	4,7%

Based on **Table 1**, it shows that 95.3% of students chose the answer Yes regarding the need

for instructional materials in the form of volleyball game videos. It is clear from the data that students feel that the development of volleyball game material using video-based learning resources is essential to assisting them in mastering the material, particularly in Physical Education subjects.

Student interviews yielded the information that teachers hardly ever use instructional media in the classroom. Teachers only use outdated teaching materials, like explanations and images, and their use of learning resources is uninteresting. This statement is supported by research from (Aryanti et al., 2021) whose study revealed that the availability of instructional videos can improve students’ comprehension of the subject matter as well as their activity and skill levels. Apart from that, research results (Aryanti et al., 2020) using learning videos can attract students’ attention in learning.

Based on the needs analysis from observations, distribution of questionnaires, and interviews, The findings of Senior High School Number 8 Palembang’s learning media needs are required, it can be said. However, there are not enough teachers in class X at Senior High School Number 8 Palembang utilizing media to enhance the learning process. The learning media developed contains material regarding basic techniques that are adapted to the learning objectives that students must achieve and is equipped with illustrations that are in line with the learning material, To help students understand the course material more easily, sentences that convey the material are written in simple language that is appropriate for their developmental stage.

(Priwanto et al., 2018) states that learning that uses technology in the media will have a significant influence on learning. Currently, the 2013 curriculum guidelines and the independent curriculum provide teachers as mediators and facilitators in learning. As a facilitator, to make it easier for students to access information, teachers must be able to offer a variety of learning resources.

## CONCLUSION

With a percentage of 95.3%, the research findings indicate that a study of students’ requirements for the usage of video-based learning materials, especially in Physical Education subjects, is absolutely essential. The learning media developed contains material regarding basic volleyball techniques that are adapted to the learning



objectives that must be achieved by students, and is equipped with illustrations that are in line with the learning material, sentences in delivering the material use simple language in accordance with students' development so that students can easily understand and understand the learning material.

## REFERENCES

- Achmad Yuhdi, N. A. (2016). Desain Media Pembelajaran Berbasis Daring Memanfaatkan Portal Schoology pada Pembelajaran Apresiasi Sastra. 2, 1–23.
- Ar-Rahman, Z., Hartati, H., & Aryanti, S. (2021). Media Latihan Berupa Video terhadap Penguasaan Gerakan Poomsae Taeguk 1 Beladiri Taekwondo pada Atlet Pemula. *Riyadhoh : Jurnal Pendidikan Olahraga*, 4(1), 97. <https://doi.org/10.31602/rjpo.v4i1.5033>
- Aryanti, S. (2020). Multimedia For Course Basketball. 978–979.
- Aryanti, S., Hartati, & Syafaruddin. (2020). Learning of badminton model through animation video on physical education students. *International Journal of Human Movement and Sports Sciences*, 8(6), 47–50. <https://doi.org/10.13189/saj.2020.080708>
- Aryanti, S., Victorian, A. R., & Solahuddin, S. (2021). *Jurnal Patriot*. 3, 329–339. <https://doi.org/10.24036/patriot.v>
- Aryanti, S., Victorian, A. R., Solahuddin, S., & Azhar, S. (2022). Kinestetik : Jurnal Ilmiah Pendidikan Jasmani Testing Media Products Using Videos For Learning. 6(74), 17–22.
- Aryanti, S., Victorian, A. R., Sriwijaya, U., Ilir, I. O., Pembelajaran, T., & Bulutangkis, P. (2017). Pengembangan teknik pembelajaran servis forehand bulutangkis bagi siswa putra sekolah menengah atas. 181–187.
- Koc, Y. (2017). The Effect of “Physical Education and Sport Culture” Course on the Attitudes of Pre-service Classroom Teachers towards Physical Education and Sports. *International Journal of Higher Education*, 6(4), 200. <https://doi.org/10.5430/ijhe.v6n4p200>
- Kuswanto, J. (2019). Perancangan Media Pembelajaran Model Game Mata Pelajaran Penjaskes Kelas V. *Jurnal SITECH : Sistem Informasi dan Teknologi*, 2(1), 103–108. <https://doi.org/10.24176/sitech.v2i1.3315>
- Maya, D., & Siagian, S. (2013). Pengembangan Media Video Pembelajaran Pangkas Rambut Lanjutan Berbasis Komputer Program Studi Tata Rias Rambut. 6(1), 1–15.
- Mochamad Ridwan, Kolektus Oky Ristanto, I Dewa Made Aryanandha, Eva Ferdita Yuhantini, M. D. F. (2020). Jurnal Pengabdian Olahraga di Masyarakat. *Jurnal Pengabdian Olahraga di Masyarakat*, 2(40), 10–12.
- Pambudi, M. E. Winarno, W. D. D. (2020). Pelaksanaan Pembelajaran Pendidikan Jasmani, Olahraga, dan Kesehatan. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, 5(3), 395. <https://doi.org/10.17977/jptpp.v5i3.13303>
- Priwanto, S. W., Fahmi, S., Astuti, D., Yogyakarta, B., Yogyakarta, B., & Yogyakarta, B. (2018). Analisis Kebutuhan Pengembangan Multimedia. 8(1).
- Rukmana, A. W., Abduloh, A., & Hidayat, A. S. (2021). Minat Belajar Siswa untuk Meningkatkan Kemampuan Pembelajaran Bola Voli di SMPN 2 Majalaya. *Jurnal Literasi Olahraga*, 2(1), 10–18. <https://doi.org/10.35706/jlo.v2i1.4359>
- Sarnoko, dkk. (2016). Penerapan Pendekatan Savi Berbantuan Video Pembelajaran Untuk Meningkatkan Siswa Kelas Iv Sdn I Sanan. 1235–1241.
- Sulaiman. (2015). Faktor-Faktor Deteminan dalam Pendidikan (Studi Tentang Makna dan Kedudukannya dalam Pendidikan). *Jurnal Ta'dib*, 8(2), 1–17. <http://ejournal.iainkendari.ac.id/al-tadib/article/view/407>
- Wang, R. F. (2017). Research on physical education problems and management reform of chinese colleges and universities. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(10), 7057–7069. <https://doi.org/10.12973/ejmste/78730>
- Wisada, P. D., Sudarma, I. K., & Yuda S, A. I. W. I. (2019). Pengembangan Media Video Pembelajaran Berorientasi Pendidikan Karakter. *Journal of Education Technology*, 3(3), 140. <https://doi.org/10.23887/jet.v3i3.21735>
- Yusfi, H, Sastra, I., Sukirno, S., & (2018). (2019). Hubungan Power Otot Lengan Dan Kelentukan Togok Dengan Hasil Smash Open Pada Kegiatan Ekstrakurikuler Bola Voli. *Altius : Jurnal Ilmu Olahraga dan Kesehatan*, 7(1). <https://doi.org/10.36706/altius.v7i1.8125> *Jurnal Ika*, 18(1), 1–22.