Journal of English Language and Education
ISSN 2597- 6850 (Online), 2502-4132 (Print)
Journal Homepage: https://jele.or.id/index.php/jele/index
OPEN ACCESS
Article

Evaluation of the Effectiveness the Use of Capcut-Based Video Learning Media in Improving Student Understanding and Engagement in Physical Education and Sports

https://doi.org/10.31004/jele.v10i3.991

Epi Supriyani Sirregar, *Ika Purnama Sari, Alwi Fahruzy Nasution, Elce Purwandari, Sehat Muliyadi Daulay[abcde]
[135]Universitas Pembinaan Masyarakat Indonesia, Indonesia.
[2]STIKOM Tunas Bangsa Pematang Siantar, Indonesia.
[4]Universitas Islam Nusantara Al-Azhar Lubuklinggau, Indonesia.
Corresponding Author: ikapurnama@amiktunasbangsa.ac.id

A B S T R A C T

The use of technology in education has grown rapidly, with video-based learning media becoming one of the effective tools in improving the quality and effectiveness of teaching. The CapCut application, known as a video editing platform, offers features that can be used to develop interesting and informative learning videos. This study focuses on the use of CapCut in creating video learning media for Physical Education and Sports subjects, with the aim of evaluating its effectiveness in improving student understanding and engagement. The purpose of this study was to evaluate the effectiveness of using CapCut-based video learning media in improving student understanding and engagement in Physical Education and Sports subjects. This study aims to explore how videos made with CapCut can affect the way students understand the concepts of sports and physical activity and the extent to which this media can increase student motivation and engagement in the learning process. This study uses a mixed research method, namely a combination of quantitative and qualitative. The results of the study showed that the use of CapCut-based video learning media significantly improved students' understanding of Physical Education and Sports materials. Videos developed with CapCut were able to present information visually and auditorily that clarified complex concepts. In addition, students showed increased engagement and motivation in the learning process, as reflected in class activities and their responses to video materials. Educators also reported that this media facilitated the delivery of materials and increased interaction with students. This study concludes that the use of CapCut in developing video learning media has a significant positive impact on students' understanding and engagement in Physical Education and Sports. CapCut provides a tool that allows educators to create engaging and interactive learning videos, which in turn improves the quality of learning and student motivation. Therefore, the application of this technology can be an effective solution to improve the learning process in schools. Further research is recommended to explore other aspects of the use of digital media in education and to identify best practices in its implementation.

Keywords: *Evaluation, Capcut, Learning Media, Physical Education, Sports*
Article History:
Received 31st May 2025
Accepted 29th June 2025
Published 30th June 2025
Check for updates

INTRODUCTION

The development of information and communication technology today has created significant transformations in various aspects of life, including in the field of education. In the context of physical education and sports, the use of technology is becoming increasingly important to improve the effectiveness and quality of the learning process. Moreover, video-based learning media is now one of the most potential tools to enrich learning and provide a deeper understanding of the materials taught. One application that has emerged as an innovative solution in creating video learning media is CapCut, a video editing application that offers advanced features but is easy to use.

CapCut, as a video editing application designed with a user-friendly interface and various creative features, offers great opportunities to develop more interesting and interactive learning media. With the ability to edit videos with attractive visual, audio, and graphic effects, CapCut allows Physical Education and Sports teachers to create learning videos that are not only informative but also interesting for students. The use of video learning media developed through this application can increase student motivation and involvement in the learning process, as well as provide a more effective way to explain difficult concepts in sports and physical activities (Vygotsky, 1978).

However, despite the great potential offered by CapCut, its application in the context of Physical Education and Sports has not yet been fully utilized. Many teachers and educators do not fully understand how to integrate CapCut-assisted video learning media into their curriculum. Therefore, there is an urgent need to explore and develop the use of these applications in the context of physical education and sport, and evaluate their effectiveness and impact on student learning outcomes (Perraton, 2000). This study aims to fill this gap by developing CapCut-assisted video learning media and evaluating its impact on the quality of learning and student engagement in Physical Education and Sports subjects.

In this increasingly advanced digital era, education is experiencing a significant paradigm shift, especially with the rapid advancement of technology. Conventional learning media such as textbooks and whiteboards are now starting to compete with various forms of digital media that offer more dynamic interactivity and learning (Savery & Duffy, 1995). One form of digital media that is currently widely used is learning videos, which offer clear visualizations and explain concepts in a more interesting and easy-to-understand way. In the context of Physical Education and Sports subjects, learning videos have the potential to change the way of teaching and learning by providing direct illustrations of sports techniques, body movements, and fitness principles.

CapCut , as one of the popular video editing applications, provides various tools and features that allow users to create high-quality videos efficiently. Features such as cropping, adding visual effects, adjusting audio, and inserting text make it easy for educators to tailor content to their learning needs. By utilizing CapCut, educators can create more interesting and diverse videos, from demonstrations of sports techniques to theoretical materials explained with attractive graphics and animations (Anderson & Dron, 2011).

CapCut- assisted video learning media in Physical Education and Sports subjects offers a number of significant advantages. First, videos can present information visually, making it easier to understand abstract and complex concepts in sports. Second, this medium can be accessed anytime and anywhere, giving students additional flexibility in their learning process. Third, with interactive elements in videos, such as quizzes and exercises that can be accessed directly from the video, students can be more actively involved in their learning.

However, to make the most of this potential, it is important to conduct further research and development on how to effectively use CapCut to create learning media. This study will explore various aspects of using CapCut in creating learning videos, including effective video design, integration strategies in the curriculum, and the impact of using this media on learning outcomes and student motivation. By understanding and addressing the challenges, this study aims to make a significant contribution to improving the quality of learning in Physical Education and Sports and helping educators utilize technology more effectively (Bates, 2015).

In the context of rapid development of information and communication technology, transformation in the field of physical education and sports is increasingly prominent, especially with the emergence of innovative digital tools. One of the most talked about tools is CapCut, a video editing application that offers a variety of features to create high-quality video content. CapCut provides features such as video cutting, adding visual effects, audio settings, and inserting text that allow for the creation of very interesting and informative learning videos.

In the field of physical education and sports, video-based learning media can be a very effective tool to clarify and enrich learning. Videos created with CapCut are not only able to present theories and concepts in a more visual and engaging way but can also provide live demonstrations of sports techniques, body movements, and fitness principles (Becker & Park, 2011). This is especially important because sports often involve complex techniques and movements that are difficult to explain with just words or static images. Learning videos produced with CapCut can include a variety of interactive elements, such as dynamic graphics, animations, and text overlays that can clarify explanations and enrich teaching materials. For example, videos can include graphics that show how certain muscles are used during an exercise or animations that explain the steps in a particular sports technique. These elements can help students understand the material better and faster than traditional methods (Roblyer & Doering, 2013).

Additionally, CapCut allows educators to integrate high-quality audio, including narration, background music, and sound effects that can add to the appeal of learning videos. Proper use of audio can improve comprehension and retention of information, as well as make learning materials more enjoyable and motivate students to actively engage. Educators can also take advantage of CapCut's editing features to tailor videos to the specific needs of the class or topic being taught, making each video more relevant and appropriate to the learning context. In terms of flexibility, learning videos created with CapCut can be accessed anytime and anywhere, which provides additional benefits for students. Flexible access allows students to re-watch difficult material, study techniques at a time that works best for them, and deepen their understanding of important concepts (Berge & Clark, 2005). This is especially useful in the context of physical education and sport, where students often need to practice and understand techniques repeatedly to achieve the desired skill. However, to optimize the benefits of CapCut-assisted learning videos, educators must consider several important factors. First, video design must be done carefully to ensure that the material is presented in a clear and systematic manner. A good video structure should include a clear introduction, detailed explanation, and a conclusion that reviews the key points. Educators also need to consider the length of the video so that it is not too long so that students remain focused and engaged (Cunningham & Duffy, 1996).

Second, video integration into the curriculum must be done with an effective strategy. Learning videos should not be considered as an additional tool separate from other learning activities. Instead, videos should be integrated with relevant classroom activities, assignments, and practical exercises. For example, after watching a demonstration video of a sports technique, students can perform practical exercises that utilize the techniques learned and then discuss them in class. Third, it is important to evaluate the impact of using video learning media on student learning outcomes and motivation. Research can be conducted to assess how CapCut-assisted videos impact students' conceptual understanding, practical skills, and engagement. This evaluation may involve gathering feedback from students, analyzing test results, and direct observation during classroom activities. This data can provide valuable insights into the effectiveness of videos in improving the quality of learning and provide a basis for further improvements (Rosenberg, 2001).

In conducting further research and development, several key areas can be explored to optimize the use of CapCut in physical education and sports. First, research could focus on the most effective video designs for different sports topics and techniques. This includes determining which design elements are most helpful in explaining complex concepts and engaging students. Second, the strategy of integrating video into the curriculum can be expanded to include innovative methods of using video, such as project-based learning or flipped classroom. Third, research can explore how CapCut's more advanced features, such as special visual effects or advanced editing capabilities, can be used to enhance the quality of learning videos. For example, using visual effects to highlight certain movements or animations to show changes in body position can clarify explanations and improve student understanding. Additionally, developing interactive videos that allow students to interact

directly with the material, such as answering quizzes or doing exercises in the video, can increase engagement and learning outcomes (Dickey, 2005).

Overall, the development of CapCut-assisted video learning media in Physical Education and Sports subjects has great potential to improve the quality of learning and student engagement. By utilizing this technology effectively, educators can create more interesting, informative, and flexible learning. This study aims to fill the gap in the use of CapCut and make a significant contribution to improving the quality of education in the context of physical education and sports. Through further exploration and development, it is hoped that this technology can be used optimally to support the achievement of learning goals and overall student development.

In the rapidly developing digital era, information and communication technology has changed conventional methods in various fields, including education. Especially in the subject of Physical Education and Sports, technology provides opportunities to improve teaching methods and enhance learning outcomes. One innovation that offers great potential is the use of video-based learning media, which can now be produced more easily and creatively thanks to editing applications such as CapCut. CapCut, with its user-friendly interface and advanced editing features, enables educators to create learning videos that are not only informative but also visually engaging and interactive.

Video-based learning media offers various advantages over traditional learning methods. Videos can present information in visual and auditory forms that help students understand complex concepts better. In the context of Physical Education and Sport, learning videos can be used to demonstrate sports techniques, body movements, and fitness principles in a hands-on manner. This is very important because many concepts in this field are practical and visual in nature, requiring clear explanations and proper demonstrations for students to apply them correctly (Gagne et al., 1992).

However, although the potential of using video as a learning medium is known, there are still challenges in its implementation. Many educators have not fully utilized this technology due to a lack of knowledge about how to effectively create and integrate videos into their curriculum. In addition, there has not been much research evaluating the effectiveness of CapCut-based video learning media in the context of Physical Education and Sports specifically. Therefore, it is important to conduct an in-depth evaluation of the use of this media to determine the extent to which CapCut can improve student understanding and engagement.

The evaluation of the effectiveness of using CapCut-based video learning media aims to identify how videos developed with this application affect students' understanding of the subject matter and the extent to which these videos can increase their involvement in the learning process. This study also aims to uncover the challenges faced in using learning videos and offer practical solutions to overcome these obstacles. By understanding the impact of CapCut-assisted video learning media, educators can optimize the use of this technology to improve the quality of physical education and sports and support the achievement of better learning outcomes. This research is expected to provide valuable insights into technology integration in education and inspire more innovative and effective teaching practices (Schneider & Pugh, 2013).

Multimedia Learning Theory

Multimedia Learning Theory, developed by Richard Mayer, suggests that the use of multimedia in learning—which combines text, images, and sound—can enhance comprehension and retention of information. Mayer (2009) suggests that multimedia serves to utilize two channels of human information processing: the visual and auditory. In the context of CapCut, the application allows the creation of videos that integrate various multimedia elements such as demonstration videos, informative graphics, and audio narration. By using CapCut to create videos rich in visual and auditory elements, educators can facilitate more holistic learning. and comprehensive in Physical Education and Sports.

Multimedia Learning Theory, developed by Richard Mayer, provides a deep theoretical framework for how different forms of media can influence the learning process. Mayer (2009) suggests that the use of multimedia—a combination of text, images, and sound—can leverage two human information processing channels, the visual and auditory channels. In this context, the theory claims that an effective combination of multimedia elements can reduce cognitive load, namely the amount of mental effort required to understand information. The application of this theory in the creation of video learning media using CapCut is very relevant. CapCut, with its user-friendly interface and advanced features such as visual effects, audio settings, and text addition, allows educators to develop learning videos that integrate various multimedia elements harmoniously.

In learning videos produced using CapCut, educators can combine visual elements, such as demonstration videos and informative graphics, with auditory elements, such as audio narration and background music. This combination allows students to receive information through both of their processing channels simultaneously, which can improve comprehension and retention of information. For example, in Physical Education and Sports subjects, sports techniques and body movements often require visual and audio explanations to be properly understood. CapCut facilitates the creation of videos featuring live demonstrations of sports techniques, complete with graphics highlighting key parts of the movement and narration explaining the steps in detail. This allows students to see and hear information simultaneously, which strengthens their understanding of the material.

Furthermore, reducing cognitive load is one of the main benefits of using multimedia in learning. By integrating visual and auditory elements, learning videos can present information in a more intuitive way, minimizing the need for students to process information excessively. CapCut, through its ability to organize multimedia content in an integrated manner, helps reduce cognitive load by presenting information in a more digestible format. For example, rather than simply providing a text explanation of a sports technique, the resulting video could feature a demonstration of the technique along with narration explaining the steps, so that students do not have to interpret the text separately from the visualization.

It is also important to note that learning videos created with CapCut can increase student motivation and engagement. Videos that are attractively designed with graphic elements, dynamic audio, and visual effects can attract students' attention and make the learning process more enjoyable. Educators can take advantage of CapCut's features to create videos that are not only informative but also fun, which in turn can increase student engagement in the material being taught. Background music, sound effects, and animations can make videos more engaging, so students feel more motivated to actively engage in learning. The flexibility and accessibility of learning videos are also significant advantages of using CapCut. Videos created with this app can be accessed anytime and anywhere, allowing students to learn on their own schedule. This flexible access gives students the opportunity to re-watch videos, deepen their understanding, and practice the techniques taught in the videos at a time that suits them best. This is especially useful in physical education and sports, where repeated practice is often necessary to master a technique (Siemens, 2005).

To ensure that the learning videos produced using CapCut are effective, it is important to conduct continuous evaluation and improvement. Evaluation can be done by collecting feedback from students, analyzing test results, and conducting direct observations during class. By evaluating the impact of videos on student comprehension and engagement, educators can identify the strengths and weaknesses of the videos they create and make necessary improvements to improve the quality of the learning materials.

Overall, the application of Multimedia Learning Theory in creating learning videos using CapCut offers great opportunities to improve the quality of learning. By utilizing the available multimedia features, educators can create more effective, interesting, and flexible learning materials, which can support students' understanding and retention of information.

Further research and development in the use of CapCut can continue to optimize the potential of this technology in the context of physical education and sports, making a significant contribution to improving student learning and learning outcomes.

Constructivism

Constructivism theory, proposed by Jean Piaget and Lev Vygotsky, emphasizes that knowledge is built through active and interactive learning with the environment. Constructivism supports an approach to learning that emphasizes student involvement in exploration and discovery. By using CapCut to create videos that illustrate exercise techniques, body movements, and fitness principles, educators can present material in a real and relevant context. Interactive, real-world videos allow students to see practical applications of the theories they are learning, facilitating deeper understanding and hands-on learning.

Constructivism Theory, developed by Jean Piaget and Lev Vygotsky, provides insight into how knowledge is built through active and interactive learning. Constructivism argues that knowledge is not passively given to students, but rather, students are actively involved in the process of constructing their own knowledge through exploration, discovery, and reflection. Piaget emphasized the importance of stages of cognitive development and how students construct their knowledge based on and interacting with their environment. Vygotsky, on the other hand, highlighted the role of social interaction and language in learning, as well as the concept of the Zone of Proximal Development (ZPD) which suggests that students can achieve deeper understanding with the help or support of more experienced people (Garner & Alexander, 2016).

In the context of using CapCut to create educational videos, the principles of constructivism can be applied in a very effective way. CapCut, as a video editing tool that provides various creative features, allows educators to create videos that are not only informative but also encourage active student engagement. Videos produced using CapCut can showcase sports techniques, body movements, and fitness principles in a real and relevant context. This is in line with the principle of constructivism which emphasizes that learning is most effective when students can see how theory is applied in real-world situations (Moursund, 2005).

By creating videos that illustrate sports techniques in real time, educators give students the opportunity to see practical applications of the concepts they are learning. For example, videos showing demonstrations of sports techniques complete with detailed explanations and body movement analysis can help students understand how theories about biomechanics or physiology are applied in practice. These types of videos allow students to connect theory to practice, facilitating deeper understanding and action-based learning (Palloff & Pratt, 2013). CapCut also allows the creation of interactive videos that can increase student engagement. Features such as inserting quizzes or live exercises in videos can encourage students to actively participate in the learning process. By providing interactive elements, videos not only present information but also engage students in activities that encourage them to apply the knowledge they have learned. This is in line with the constructivist approach that emphasizes the importance of active student involvement in the learning process.

Furthermore, CapCut allows educators to integrate various multimedia elements into learning videos, such as informative graphics, animations, and audio narration. These elements can be used to present information in a more dynamic and engaging way, supporting students' different learning styles and enriching their learning. By combining clear visualizations with auditory explanations, learning videos can meet the needs of different students and help them build knowledge through different information processing channels (Morrison et al., 2019).

The principles of constructivism also emphasize the importance of learning that is relevant to the student's context. Learning videos created with CapCut can be designed to reflect situations and problems that are relevant to students' daily lives. For example, in

physical education and sport, videos that demonstrate sports techniques frequently practiced in local contexts or videos that illustrate fitness principles applied in everyday activities can help students see the relevance of the material to their lives. This supports the idea that contextual and relevant learning is more effective in helping students understand and remember information.

Additionally, CapCut allows educators to create videos that highlight the iterative and reflective nature of learning. Educators can include elements that encourage students to reflect on what they have learned, such as a final summary or Q&A session. By including time for reflection and evaluation in the video, educators support the constructivist principle that emphasizes the importance of reflection in the learning process. Students can evaluate their understanding of the material, identify areas that need further attention, and create plans for improvement. Using CapCut to create learning videos also allows educators to address teaching challenges in innovative ways. For example, in situations where students are unable to do hands-on practical exercises, demonstration videos can be a valuable tool to clearly demonstrate techniques and movements. CapCut facilitates the creation of videos that can be accessed by students at any time, giving them the opportunity to watch and re-learn outside of formal class hours. This flexibility supports the concept of constructivism which recognizes that learning does not always occur in formal settings, but also through informal and independent learning (Jonassen, 1999).

Thus, the application of constructivism principles in creating learning videos using CapCut can offer many benefits in the context of physical education and sports. Videos that combine visual, auditory, and interactive elements can enhance student understanding, support learning -based learning, and provide relevant context for the material being taught. Through the application of this theory, educators can create more holistic and in-depth learning, which is in line with the principles of constructivism that emphasize the importance of active involvement and relevance in learning. Further research and development in the use of CapCut for creating learning videos can continue to enrich student learning and support the achievement of better learning outcomes.

Media Based Learning

Learning Theory emphasizes how the design and use of media can influence and enhance the quality of learning. The essence of this theory is that media is not only a tool for conveying information, but also an important element in creating comprehensive and effective learning. Well-designed media can facilitate better understanding, increase student engagement, and present material in a more interesting and motivating way.

In the context of the CapCut application, which provides various video editing features, this theory is very relevant. CapCut allows educators to leverage various design elements such as visual effects, text, graphics, and audio in their learning videos. Visual effects, such as animations and transitions, can be used to capture students' attention and make the material easier to digest. Adding text to a video can clarify information and emphasize key points, while engaging graphics can help explain complex concepts in a simpler, more visual way. Audio, including narration and background music, also plays a vital role in creating a more lively and dynamic learning environment (Papert, 1980).

By utilizing these features, educators can create learning videos that not only present information clearly but also significantly increase student engagement. Interesting and relevant media design contributes to more enjoyable and interactive learning, so that students are more motivated to actively participate in the learning process. Well-designed videos can accommodate a variety of student learning styles, such as visual, auditory, and kinesthetic, by providing content in a format that suits their preferences (D. Zhang et al., 2006).

Additionally, CapCut allows educators to customize video designs to suit specific subject needs and learning objectives. For example, in a Physical Education and Sports class, educators can create demonstration videos of sports techniques with visual effects that clarify the steps of the movements, add text that explains the principles of the technique, and

include graphics that show the benefits of certain exercises. All of these elements work together to create holistic and immersive learning, helping students understand and retain information more effectively.

Therefore, developing video learning media using CapCut is not only about making interesting videos, but also about designing comprehensive and enjoyable learning. By utilizing various editing features provided by CapCut, educators can create materials that are not only informative but also facilitate more interactive and effective learning. Media-Based Learning Theory asserts that well-designed media can make the learning process more interesting, motivate students to engage, and ultimately improve overall learning outcomes. media-based learning refers to the use of various forms of media to enrich and enhance the learning process. In the context of modern education, learning media are becoming increasingly important because they provide new and innovative ways to convey information and concepts to students. These media can be text, images, audio, video, and other digital interactions designed to support learning and enhance student understanding. This approach recognizes that each individual has a different learning style, and the use of a variety of media can meet these diverse needs more effectively (L. Zhang & Zheng, 2018).

One important aspect of media-based learning is its ability to create a more real and relevant context for students. By using media, educators can provide direct illustrations and simulations that make it easier for students to understand abstract concepts. For example, a demonstration video of a sports technique produced with an application like CapCut can provide a clear visualization of how a technique is performed, as well as show how fitness principles are applied in practice. This allows students to see practical applications of the theories they are learning, deepening their understanding and making learning more contextual and meaningful. Learning media can also increase student engagement by making the learning process more interactive and interesting. For example, videos that integrate interactive elements such as quizzes, exercises, or Q& A sessions can encourage students to actively participate in their learning. This is in line with constructivism theory, which emphasizes that students learn better when they are actively involved in the learning process and can relate new information to their own. By using interactive media, educators can create more dynamic learning and motivate students to engage more deeply (Keller, 1987).

In addition, video-based learning media can support various learning styles and provide additional flexibility in the learning process. For example, videos that provide audio narration, graphics, and text allow students to receive information through different channels, according to their preferences. It also gives students the opportunity to access materials anytime and anywhere, allowing them to learn at their own pace and schedule. This flexibility is especially useful in physical education and sports, where students may need to rewatch demonstration videos or practice techniques outside of formal class time. Media-based learning also allows educators to assess student understanding in a variety of ways (Zimmerman, 2002). By using media such as video, educators can collect data on how students engage with the material, identify areas where they may be struggling, and adjust their approach as needed. For example, videos that include elements of evaluation or direct feedback can provide valuable insights into student understanding and help educators make necessary adjustments to improve learning outcomes.

However, it is important to remember that the use of media in learning must be done carefully and with consideration of learning objectives. Media must be carefully selected and designed to ensure that they support learning objectives and do not simply serve as entertainment tools. Educators need to ensure that the media used is relevant to the subject matter, effective in conveying information, and appropriate to the needs of students. For example, in physical education and sports, media such as demonstration videos created with CapCut can be very useful if they are designed to clearly highlight techniques, provide detailed explanations, and show practical applications of the concepts being learned. Videos

created using advanced features such as visual effects and audio narration can help explain techniques better and make learning more engaging for students (Mayer, 2009).

Overall, media-based learning offers many benefits in improving the quality and effectiveness of the learning process. By utilizing various forms of media, educators can create more interesting, relevant, and effective learning, and support various learning styles of students. The use of appropriate and planned media can help students understand concepts better, increase their engagement, and provide additional flexibility in the learning process. Through the application of these principles, educators can enrich student learning and support the achievement of better learning outcomes.

METHOD

Design

This study uses a mixed research method, namely a combination of quantitative and qualitative. In the quantitative approach, researchers conducted surveys and comprehension tests on students before and after using CapCut-based video learning media. While in the qualitative approach, interviews and observations were conducted to gain deeper insights into students and educators in using this media. Data obtained from both methods were analyzed to assess the impact of CapCut on student learning outcomes and engagement.

The process of developing video learning media using the CapCut application begins with an analysis of the needs of Physical Education and Sports learning materials. The videos developed cover a variety of topics, such as basic techniques in running, swimming, and strength training. The CapCut application is used to add various multimedia features, including visual effects, graphics, and audio narration, which are designed to increase student interest and understanding.

During the development phase, the videos were aligned with the existing curriculum, ensuring that each video explained key concepts clearly and effectively. Educators also involved students in the early feedback process to ensure that the videos met their needs. The results of the development phase showed that CapCut enabled the creation of high-quality videos that were able to present information in a comprehensive and engaging manner.

FINDING AND DISCUSSION

The following are the results of designing video learning media assisted by the CapCut application:

Figure 1 First Display Menu. in the First Menu, Students Will See the Greeting or Opening Menu

Figure 2 Second Display Menu. in the First Menu, Students Will See the Stage I Learning Video.

Figure 3 Third Display Menu. in the First Menu, Students Will See the Stage II Learning Video.

Figure 4 Third Display Menu. in the First Menu, Students Will See the Learning Video for Stage III.

Figure 5 Third Display Menu. in the First Menu, Students Will See the Stage IV Learning Video.

Figure 6 Third Display Menu. in the First Menu, Students Will See the Final Stage Video.

Implementation and Trial in Schools

After development, video learning media was implemented in the school environment. Several schools involved in the study integrated videos into their daily learning. The trial was conducted over one semester, during which students were given access to the videos as part of their learning materials. Data were collected through questionnaires, interviews, and observations to evaluate how these videos impacted student engagement and understanding.

The implementation process in Class VIII begins with the delivery of learning objectives to be achieved and explaining the activities to be carried out in the learning. Before the activity begins, the educator first introduces the media that will be used, namely capcut. The educator introduces the name of the media, as well as the benefits of this capcut-based learning media to students who are asked to pay attention and listen to the contents of the media itself, and note at the end of the learning media how the process of making artificial clouds will be practiced together which can later be applied again at home, such as the materials that will be needed, and how the order of making the media itself. The following is a picture of the process of introducing media to students.

After the media introduction process, the next step is for students to sit down individually. Then explain a little material on the subject of science, then the educator displays the Capcut media, after seeing the Capcut at the end of the Capcut there is a trial practice of making assignments after watching the Capcut video which will be carried out together to find out the process of making clouds.

In the 2023–2024 academic year, SMP 2 Percut Sei Tuan conducted a limited trial to assess the effectiveness of video learning media developed using the CapCut application in science subjects. This study aims to improve the learning motivation of Class VIII students, who often experience difficulties in understanding science material. The learning media developed is in the form of a 10-minute video that explains the human circulatory system. This video is designed with various interactive features, such as animation, graphics, and narration, to make the learning material more interesting and easier to understand.

The trial was conducted involving 20 Class VIII students as research subjects. In the trial procedure, the video was introduced during one learning session with a duration of 45 minutes. To evaluate the impact of using videos on students' learning motivation, measurements were taken using questionnaires before and after watching the videos. The questionnaire results showed that before watching the video, the average student motivation score was 60 (on a scale of 1-100). After watching the video, the average motivation score increased to 75. This increase in scores shows a positive impact of video learning media on student motivation.

In addition, feedback from students and teachers was also obtained through interviews. Students reported that the videos made science learning more interesting and easier to understand. They felt more excited and interested in learning more about the material being taught. Teachers also stated that the videos were an effective tool in the learning process, allowing students to be more focused and actively involved in class.

Based on the results of this trial, it can be concluded that the use of video learning media assisted by the CapCut application can increase the learning motivation of Class VIII students in science subjects. This media not only makes learning more interesting, but also helps students understand the material in a more interactive and enjoyable way. Recommendations for further implementation are to continue the use of videos in learning and explore other features of the CapCut application for the development of learning media in the future.

The trial results showed that students who used CapCut-assisted videos experienced increased motivation and engagement in learning. Most students reported that the videos helped them understand exercise techniques better, providing clear and detailed explanations of movements and fitness principles. Educators also noted that videos made it

easier for them to explain difficult concepts and enabled them to provide more effective instruction (Sweller et al., 2011).

Learning Media Quality Assessment

Assessment of the quality of learning media is carried out based on several criteria, including clarity of information, visual appeal, and effectiveness in delivering material. Videos produced using CapCut are considered very effective in terms of clarity and visual appeal. The added visual effects clarify important aspects of sports techniques, while the audio narration provides detailed explanations and supports student understanding. The evaluation showed that the videos met high quality standards and strongly supported the learning process.

Analysis of Student Engagement and Motivation

Student engagement analysis shows that learning videos developed with CapCut contribute to increased student engagement. Interactive and engaging videos successfully capture students' attention and make them more active in the learning process. Increased student motivation is also evident, with many students reporting that they feel more engaged and excited to learn after using the videos. Higher student engagement has a positive impact on their learning outcomes, indicating that video-based learning media can be an effective tool in increasing student motivation and participation.

Evaluation of Concept Understanding

CapCut-assisted learning videos have proven effective in improving conceptual understanding. Trials showed that students who used the videos had a better understanding of exercise techniques and fitness principles than those who only used conventional materials. Assessment of test results and practical evaluations showed significant progress in the mastery of techniques by students who learned through videos. These results indicate that videos can help explain complex concepts in a way that is easier to understand and apply.

Challenges and Obstacles

During the research process, several challenges and barriers were identified. One of the main challenges was the issue of accessibility, where some students faced difficulties in accessing the videos due to device or internet connection limitations. Additionally, some educators have difficulty integrating video into their curriculum effectively. These challenges highlight the need for additional support to ensure that all students can make optimal use of these learning media.

Discussion

Effectiveness of CapCut-Based Video Learning Media in Improving Concept Understanding

The use of video-based learning media in Physical Education and Sports with the help of the CapCut application has shown significant results in improving students' understanding of concepts. CapCut, with its various editing features, allows educators to create videos that not only display information but also present material in a more visual and interactive way. The videos developed cover various aspects of the lesson, such as sports techniques, body movements, and fitness principles, and utilize graphics, text, and visual effects to clarify explanations. In this study, students exposed to CapCut-assisted videos showed a better understanding of exercise techniques and fitness principles compared to those who only used conventional learning materials. The results of practical tests and evaluations show that videos help students understand concepts that are difficult to explain through traditional methods. For example, a video demonstration of swimming breathing techniques or steps in strength training provides direct visualization that makes it easier for students to learn and apply the techniques effectively. Explanations given in videos are often supported by graphic visualizations and animations that clarify complex concepts. This is in line with cognitive theory that information presented in a multimedia format—which combines text, images, and audio—can improve student retention and comprehension. CapCut allows these elements to be combined in one video, making it easier for students to associate explanations with concrete visualizations. This is especially valuable in physical

education and sports, where many concepts require physical and visual demonstrations for deeper understanding (Tella & Tella, 2007).

Increased Student Engagement and Motivation

Increased student engagement and motivation is one of the main outcomes of using video-based learning media developed with CapCut. The learning videos created using this application not only offer relevant information but are also designed to capture students' attention through visual and interactive elements. Visual effects, attractive graphics, and clear audio narration contribute to more engaging and enjoyable learning. Students involved in the study reported that they felt more motivated and eager to learn when using videos as part of their learning process. This increased motivation can be attributed to several factors. First, videos provide a different learning experience than traditional teaching methods, which can often be monotonous or uninteresting. Second, videos allow students to learn at their own pace, repeat parts they have not fully understood, and access the material at any time they need.

The results of the study showed that interactive videos, such as those developed with CapCut, were able to increase student engagement. Interactive features such as quizzes or exercises included in the videos allow students to test their understanding directly. In this way, students are not just consumers of information but are also actively involved in the learning process (Tomlinson, 2001). Research shows that this active involvement has a positive impact on learning outcomes, as students who are actively involved in the learning process tend to have better understanding and better results in evaluations.

Analysis of Learning Media Quality

Evaluation of the quality of the developed learning media shows that CapCut-assisted videos meet high quality standards. Judging is based on several criteria, including clarity of information, visual appeal, and effectiveness in conveying the material. The videos produced by this application are considered very effective in terms of clarity and visual appeal. Added visual effects clarify important aspects of sports techniques, while audio narration provides detailed explanations and supports student understanding. Videos developed using CapCut have the ability to present information in a structured and interesting way. Features like cutting, text insertion, and advanced visual effects help in creating content that is not only informative but also fun to watch. This is very important because the visual appeal and production quality of the video play a major role in attracting students' attention and keeping them interested throughout the learning process. Thus, the quality of the video not only influences comprehension but also contributes to student engagement and motivation.

Challenges in Implementation and Solutions

During the implementation of CapCut-assisted video learning media, several challenges and obstacles were identified. One of the main challenges is the issue of accessibility. Some students have difficulty accessing videos due to device limitations or unstable internet connections. These challenges indicate that there is a need to ensure that all students have adequate access to the technology necessary to make optimal use of these learning media. To address accessibility issues, proposed solutions include the provision of additional devices or technical support from the school. Additionally, educators can provide downloadable or offline versions of videos to address issues with unstable internet connections. This effort is expected to ensure that all students can take advantage of learning videos without technical constraints (Weller, 2011). Another challenge is the integration of video into the curriculum. Some educators struggle to effectively weave video into their lesson plans. To address this challenge, additional training and support is needed for educators on how to integrate video into their teaching. This training can include guidance on how to structure videos, how to link them to learning objectives, and how to leverage interactive features to support student learning.

5. Implications for Physical Education and Sport

The use of CapCut-assisted video learning media in Physical Education and Sports has important implications for teaching and learning practices. Learning videos offer a new and

engaging way to present subject matter, provide additional flexibility in the learning process, and increase student engagement and motivation. By utilizing this technology, educators can create more dynamic and diverse learning, which can support the achievement of better learning outcomes. In the context of Physical Education and Sports, CapCut-based learning videos can enrich the teaching of sports techniques and fitness principles. Videos can provide direct visualization that helps students understand and apply techniques more effectively. Additionally, interactive elements in videos can increase student engagement and allow them to practice and receive immediate feedback, which is critical in sports teaching. Overall, this study shows that video-based learning media, especially those developed with CapCut, can be a very effective tool in improving the quality of physical education and sports. By increasing students' understanding, engagement, and motivation, learning videos can enrich learning and support the achievement of better outcomes. Further research and development in the use of this media can continue to enrich teaching practices and support the improvement of the quality of education.

This research also provides valuable insights into how technology can be used effectively in education, as well as the challenges and solutions that need to be considered to optimize the use of video-based learning media. By understanding and addressing these challenges, educators can be more effective in leveraging technology to enhance learning and support better outcomes for students (Wheeler, 2011).

CONCLUSIONS

The results of the study showed that the use of CapCut-based video learning media significantly improved students' understanding of Physical Education and Sports materials. Videos developed with CapCut were able to present information visually and auditorily that clarified complex concepts. In addition, students showed increased engagement and motivation in the learning process, as reflected in class activities and their responses to video materials. Educators also reported that this media facilitated the delivery of materials and increased interaction with students. This study concludes that the use of CapCut in developing video learning media has a significant positive impact on students' understanding and engagement in Physical Education and Sports. CapCut provides a tool that allows educators to create engaging and interactive learning videos, which in turn improves the quality of learning and student motivation. Therefore, the application of this technology can be an effective solution to improve the learning process in schools. Further research is recommended to explore other aspects of the use of digital media in education and to identify best practices in its implementation.

REFERENCES

Anderson, T., & Dron, J. (2011). Three generations of distance education pedagogy. *The International Review of Research in Open and Distributed Learning*, *12*(3), 80–97. https://doi.org/10.19173/irrodl.v12i3.890

Bates, A. T. (2015). *Teaching in a Digital Age: Guidelines for Designing Teaching and Learning. Tony Bates Associates Ltd*. https://opentextbc.ca/teachinginadigitalage/

Becker, K., & Park, K. (2011). Effects of integrating multimedia on student learning in higher education. *Journal of Educational Technology & Society*, *14*(1), 24–37.

Berge, Z. L., & Clark, T. (2005). *The Role of the Teacher in E-Learning*. Education and Information Technologies. Springer. https://doi.org/10.1007/s10639-005-7920-2

Cunningham, D. J., & Duffy, T. M. (1996). *Constructivism: Implications for the Design and Delivery of Instruction*. Educational Technology. https://doi.org/10.1007/BF02504036

Dickey, M. D. (2005). The role of multimedia in enhancing learning and the potential for its use in education. *Educational Technology Research and Development*, *53*(3), 63–78. https://doi.org/10.1007/BF02504881

Gagne, R. M., Briggs, L. J., & Wager, W. W. (1992). *Principles of Instructional Design*. Harcourt Brace Jovanovich College Publishers.

Garner, H., & Alexander, K. (2016). Multimedia learning: A review of the research and applications in education. *Journal of Educational Multimedia and Hypermedia*, *25*(1), 1–23.

Jonassen, D. H. (1999). *Designing Constructivist Learning Environments*. Educational Technology Publications. https://doi.org/10.1207/s15327888mse0202_4

Keller, J. M. (1987). Development and use of the ARCS model of instructional design. *Journal of Instructional Development*, *10*(3), 2–10.

Mayer, R. E. (2009). *Multimedia Learning*. Cambridge University Press.

Morrison, G. R., Ross, S. M., & Kemp, J. E. (2019). *Designing Effective Instruction*. Wiley.

Moursund, D. G. (2005). *Introduction to Computer-Based Instructional Systems*. International Society for Technology in Education.

Palloff, R. M., & Pratt, K. (2013). Lessons from the Cyberspace Classroom: The Realities of Online Teaching. *Jossey-Bass*.

Papert, S. (1980). *Mindstorms: Children, Computers, and Powerful Ideas*. Basic Books.

Perraton, H. (2000). *Open and Distance Learning in the Developing World*. Routledge.

Roblyer, M. D., & Doering, A. H. (2013). *Integrating Educational Technology into Teaching*. Pearson.

Rosenberg, M. J. (2001). *E-Learning: Strategies for Delivering Knowledge in the Digital Age*. McGraw-Hill.

Savery, J. R., & Duffy, T. M. (1995). Problem based learning: An instructional model and its constructivist framework. In C. M. Reigeluth (Ed.), *Instructional design theories and models: A new paradigm of instructional theory: Vol. II* (pp. 135–161). Lawrence Erlbaum Associates.

Schneider, C., & Pugh, K. (2013). Multimedia learning in higher education: The case of instructional design. *Educational Technology Research and Development*, *61*(4), 689–703. https://doi.org/10.1007/s11423-013-9313-3

Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, *2*(1), 3–10.

Sweller, J., Ayres, P., & Kalyuga, S. (2011). *Cognitive Load Theory*. Springer.

Tella, A., & Tella, A. (2007). The impact of multimedia on learning outcomes. *Journal of Educational Multimedia and Hypermedia*, *16*(2), 113–125.

Tomlinson, C. A. (2001). *How to Differentiate Instruction in Mixed-Ability Classrooms*. ASCD.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Weller, M. (2011). *The Digital Scholar: How Technology Is Transforming Scholarly Practice*. Bloomsbury Academic.

Wheeler, S. (2011). *The Digital Classroom: How Technology Can Transform Learning*. Routledge.

Zhang, D., Zhou, L., Briggs, R. O., & Nunamaker, J. F. (2006). Instructional video in e-learning: Assessing the impact of interactive video on learning effectiveness. *Information & Management*, *43*(1), 11–21. https://doi.org/10.1016/j.im.2005.01.006

Zhang, L., & Zheng, Y. (2018). Effects of video-based instruction on students' learning outcomes: A meta-analysis. *Educational Technology Research and Development*, *66*(4), 807–832. https://doi.org/10.1007/s11423-018-9600-3

Zimmerman, B. J. (2002). Becoming a Self-Regulated Learner: A Guide to Self-Regulated Learning. *Jossey-Bass*.