



# Innovative Learning Video: Combination of Basic Locomotor Movement Patterns for First Grade Elementary Students

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## ABSTRAK

Kurangnya perkembangan belajar siswa pada materi pembelajaran pendidikan jasmani, olahraga, dan kesehatan (PJOK) menjadi tantangan bagi tenaga pendidik untuk meningkatkan pemahaman belajar siswa. Penelitian ini bertujuan untuk mengembangkan media video pembelajaran PJOK dalam materi kombinasi gerak dasar lokomotor untuk peserta didik kelas I sekolah dasar. Penelitian ini merupakan penelitian pengembangan (R&D) dengan menggunakan model ADDIE. Subjek penelitian adalah siswa kelas I sekolah dasar. Data diperoleh melalui teknik non tes untuk mendapatkan data tentang validitas dan kepraktisan produk dan metode tes untuk keefektifan produk. Data dianalisis dengan persentase untuk uji validitas dan kepraktisan, sedangkan uji efektivitas dilakukan dengan uji-t burning dengan desain one group pretest-posttest design. Hasil penelitian menunjukkan bahwa video pembelajaran PJOK materi kombinasi pola gerak dasar lokomotor dinyatakan sangat valid, praktis dengan kualifikasi sangat baik, dan efektif untuk meningkatkan pemahaman siswa tentang gerak lokomotor. Berdasarkan hasil tersebut, disimpulkan bahwa inovasi video pembelajaran PJOK materi kombinasi pola gerak dasar lokomotor dinyatakan layak sebagai sumber belajar dan efektif. Penelitian ini berimplikasi pada peningkatan pemahaman siswa sekolah dasar mengenai kombinasi gerak dasar lokomotor.

## ABSTRACT

The lack of student learning development in physical education, sports, and health (PJOK) learning materials is a challenge for educators to improve students' learning understanding. This study aims to develop PJOK learning video media in the material of basic locomotor movement combinations for grade I elementary school students. This study is a development research (R&D) using the ADDIE model. The subjects of the study were grade I elementary school students. Data were obtained through non-test techniques to obtain data on the validity and practicality of the product and test methods for product effectiveness. Data were analyzed with percentages for validity and practicality tests, while effectiveness tests were carried out using a t-test burning with a one group pretest-posttest design. The results showed that the PJOK learning video material on the combination of basic locomotor movement patterns was declared very valid, practical with very good qualifications, and effective in improving students' understanding of locomotor movements. Based on these results, it was concluded that the innovation of PJOK learning videos on the combination of basic locomotor movement patterns was declared feasible as a learning resource and effective. This study has implications for improving elementary school students' understanding of basic locomotor movement combinations.

## 1. INTRODUCTION

At the elementary school level, the learning process carried out in grade I of elementary school is inseparable from what is called Physical Education, Sports and Health or often called PJOK. Physical Education, Sports and Health is an integral part of education as a whole, aiming to develop aspects of physical fitness, motor skills, critical thinking skills, social skills, reasoning, emotional stability, moral actions, aspects of healthy lifestyles and introduction to a clean environment through selected physical, sports and health activities that are planned systematically in order to achieve national education goals (Rusdin et al., 2022; Kiranida, 2019). Based on the explanation, PJOK is part of the entire subject taught in school and cannot be separated from other education, even a very important part of education in supporting other educational processes. In elementary schools, the goal to be achieved in the PJOK subject is to help

students to be able to improve physical fitness and maintain health which is carried out by introducing and instilling positive attitudes and basic movement skills through various physical activities (Pangkey & Mahfud, 2020; Nurmai et al., 2018).

Basic movements have an important role in physical education learning, basic movement skills can be applied in various games, sports, and physical activities carried out daily. There are three basic movements inherent in individuals, namely, 1) locomotor, (2) non-locomotor movements, (3) manipulative. This movement is one form of motor movement that must be mastered by students through physical education (Pangkey & Mahfud, 2020; Nugraha et al., 2018). Locomotor movement is a basic movement skill that moves the body from one place to another, such as running, walking, jumping forward, jumping backward and so on (Muhammad et al., 2024; Sari et al., 2019). Based on the results of initial observations conducted by researchers with PJOK teachers at SD Negeri 1 Dajan Peken in Tabanan District on July 10, 2023, it was said that physical education, sports and health learning in schools had been running as it should. Facilities and infrastructure have supported the learning process and are available sufficiently for use in PJOK learning. Almost all teachers already have a guidebook that is used in teaching.

One of the materials taught to students, especially in grade I of elementary school, is the material on basic locomotor movement patterns. Based on interviews with respondents 1, 2 and 3 as PJOK teachers who teach at the school, it is known that in teaching this basic locomotor movement pattern material, teachers apply it using game methods. In this PJOK subject, teachers rarely apply basic techniques in performing locomotor movements. The results of observations also show that teachers use teaching modules, but their use is still considered ineffective. Steps that can overcome this are by using or applying technology in learning. Currently, almost all educational and learning activities must integrate technology with the right strategy (Wahyudi, 2024; Sakti, 2023). Physical Education teachers need to have adequate readiness in integrating technology into the learning process and utilizing various ICT tools to create interesting and effective learning experiences for students, such as creating various learning media (Setiawan et al., 2024; Faturahim & Purwanto, 2023). One of the interesting learning media for students is the use of video/audio visual media which will make the presentation of teaching materials to students more complete and optimal (Mamba'usa'adah & Syafwandi, 2023; Muslim, 2021).

Audio visual media is media that can be heard and seen. Audio visual media has the function of attracting attention and focusing student concentration, learning objectives are achieved more quickly by understanding and remembering messages in the media, and can overcome passive students with appropriate and varied media (Hasan, 2024; Marliani, 2021). Examples of audio visual media include video or television programs, and sound slide programs. The characteristics of learning videos include clarity of message (clarity of message), stand alone (stand alone), user friendly (familiar with the user), content representation, and visualization with media. Learning video media can provide a more realistic model to students so that students can play an active role in the learning process. Previous research revealed that teachers must pay attention to PJOK teaching strategies by collaborating learning materials through a game theme related to the learning theme and applying the movements through a media and learning video, in addition, the use of videos in the learning process aims to make students catch and understand the material presented more quickly and the delivery of material through this video media will be easier for educators or teachers (Sanjaya et al., 2023; Marliani, 2021; Situmorang et al., 2021).

Learning video media can be used individually using gadgets and computers anytime and anywhere. Video media can also increase student learning motivation, so that learning in the classroom becomes more enjoyable and makes students not feel bored while learning is taking place (Afrilia et al., 2022; Marliani, 2021). Technology media in the learning process provides many benefits for education, including educators (teachers) and learners (students) (Permana et al., 2024; Mulyani & Haliza, 2021). Media in the form of videos can train hearing and vision (Putri & Fitria, 2020; Nurdin et al., 2019). Based on this, it can be concluded that PJOK teachers really hope for a learning video media, especially on the basic locomotor movement material. Regarding the learning video media, especially on the basic locomotor movement pattern material, it can be said that it is still limited. This is because the learning videos that are already available on YouTube, Google and other video pages, especially on the basic locomotor movement material, are only in the form of games without explaining the basics of doing basic locomotor movements.

Previous research has proven that video media can motivate and improve students' learning outcomes and achievements (Hudain et al., 2023; Soemaryoto, 2022; Prabawa et al., 2021; Pranata et al., 2021). Based on previous research, video media will be used in learning locomotor movements so that students can better understand the flow of the game compared to the basic techniques in performing locomotor movements. This is also based on the results of previous research which shows that media in learning can increase the effectiveness of PJOK learning of locomotor movement material (Rahmadani et al., 2023; Dewi et al., 2021).

The urgency of this research lies in the lack of student learning development in physical education, sports, and health (PJOK) material which is a challenge for educators to improve student understanding. In addition, the effective use of video media encourages the author to develop learning media in the form of interactive videos that are adjusted to student characteristics in order to maximize learning outcomes. Therefore, this study aims to develop PJOK learning video media in the combination of basic locomotor movement material for grade I elementary school students. The novelty of this study is The developed media is shown to first grade students who are rarely taught with the help of technology. This media is expected to improve elementary school students' understanding of basic locomotor movement combinations and integrate technology in learning.

## 2. METHOD

This research uses research and development methods. This study creates teaching materials in the form of PJOK learning videos on the combination of basic locomotor movement patterns for grade I students. The ADDIE model consists of five steps, namely Analysis, Design, Development, Implementation and Evaluation. The ADDIE development model provides many opportunities and chances for researchers to evaluate product development in each stage through revision or improvement activities aimed at minimizing the weaknesses and deficiencies of the products produced in the final phase. The five stages in the ADDIE model are very easy to understand and implement to develop development products, such as teaching materials, books, learning modules, videos and learning multimedia and so on. The following explains the development steps using the ADDIE model.

The analysis stage is carried out to identify possible causes of a learning performance gap. At this stage, researchers or teachers must be able to design instructions that will cover deficiencies and gaps, and offer solutions to cover deficiencies and gaps based on empirical evidence for the success of the learning process. If this stage is applied due to lack of knowledge and skills, then other alternatives must be proposed, so this stage in the ADDIE model is not appropriate to use. The design stage is carried out to verify readiness, willingness, and appropriate test methods. At this stage, researchers or teachers must be able to prepare a specific system to cover the deficiencies and gaps in the learning process. In this case, teachers must be able to grow and have a strong relationship with students to understand the goals, intentions, strategies, and assessments through the design stage in the ADDIE model.

The development stage is carried out to validate and produce the selected learning resources. Researchers or teachers must be able to identify the resources needed in implementing the planned learning. At this stage, researchers or teachers are expected to be able to produce complete learning resources such as strategies, models, media, and so on. Researchers or teachers are expected to be able to develop formative evaluation designs and validate them until it produces a revision. The implementation stage is carried out with the aim that teachers can prepare an atmosphere and learning environment that can involve students well during the learning process. Teachers need to develop new knowledge and skills to cover student deficiencies, while adjusting to student conditions. The results of this stage are implementation strategies in the form of learning plans and facilitator plans.

The evaluation stage is carried out with the aim of assessing the quality of learning resources or products and the teaching process both before and after implementation. Teachers must be able to recommend improvements for the next competency with the same scope after the level of success of the learning has been identified. The research on the development of media in the form of PJOK learning videos on the combination of basic locomotor movement patterns for grade I elementary school students must be tested for validity or feasibility and practicality. The product trial analysis is carried out in two stages.

The first stage is a review or validity from experts conducted by content/learning material experts, learning design experts, and learning media experts. The second stage is a practicality test, namely a product trial by field practitioners (PJOK teachers). Furthermore, the product that has been declared feasible from the practicality test is then calculated for its effectiveness by conducting a pretest and posttest to class I students using the one group pretest-posttest design method. The subjects of the product trial from this development research include several stages, namely: (1) expert review stage, (2) practicality test stage, and (3) effectiveness test stage.

The type of data that used in this development research are quantitative data and qualitative data. Quantitative data is data that can show the amount of something in the form of numbers or scores. Quantitative data in this study were obtained from closed questionnaires, namely the results of expert assessments of learning content, expert assessments of design, expert assessments of learning media, and individual trial stages and small group trial stages and field tests. In this learning video media development research, quantitative data is in the form of qualitative survey data Scale 5 which is converted into scores or values, namely Strongly Agree (SS) = 5; Agree (S) = 4; Doubt (R) = 3; Disagree (TS) = 2; Strongly Disagree

(STS) = 1. While qualitative data is data that can show the state or nature of something in the form of a category. Qualitative data in this study comes from responses, assessment results, input, criticism, and suggestions for improvement obtained from the results of open questionnaires reviewed by experts and media users.

In this study, the data collected was obtained based on the data collection method through data collection instruments. The data collection method used in this development research is the test and non-test method. The non-test method is data collection through observation, interviews, and questionnaires. Then the instrument used to collect data in this development research is in the form of a questionnaire sheet and a test instrument. The questionnaire used consists of questions made based on the aspects to be assessed. This study used a closed questionnaire. Meanwhile, the test instrument used in this study is a descriptive test. This descriptive test will be given to students to test the effectiveness of the product, namely by providing a pretest and posttest. The questionnaire sheet needs to be validated first by the authorized supervisor before being given to respondents, so that it can be declared suitable for use. Furthermore, the questionnaire sheet is given to experts to review the products that have been made. In addition, the questionnaire sheet is also given to students.

Data collection instruments were obtained through learning material expert instruments, learning media, and teacher practicality test consisting of several aspects that were tested. Data were analyzed using quantitative descriptive data analysis, qualitative descriptive data analysis, and inferential statistical analysis techniques (t-test). Quantitative data analysis was carried out to determine the magnitude of the validity value and practicality of the module that had been developed. While the t-test was used to determine the effectiveness of the product on students' learning motivation. The data analysis used to determine the validity of the learning video media was to use the assessment results of four experts. Then, the data was analyzed using cross tabulation proposed by Gregory, namely the validity test, practicality test, and activity test. In the activity test, the effectiveness of the media on the learning video media was calculated using a t-burning test design with a one group pretest-posttest design. There are several stages of testing carried out, namely the normality test of data distribution, the homogeneity test of variance, and the hypothesis test (t-burning test). Before carrying out the hypothesis test, a prerequisite test must be carried out first. The prerequisite tests carried out include the normality test of data distribution and the homogeneity test of variance. If the data distribution is normal and homogeneous, then the hypothesis test can be carried out.

### 3. RESULT AND DISCUSSION

#### Result

This development research aims to develop a video media for learning PJOK on the material of basic locomotor movement pattern combination for grade I elementary school students. Based on the development of learning video media, there are 3 things investigated, namely: level of validity, level of practicality, and level of effectiveness. The design results show that the PJOK learning video media on the material of basic locomotor movement pattern combination has characteristics that are adjusted to the theoretical study. The characteristics of the developed learning video media can be presented as follows.

The components of the learning video media include the cover, introduction, content and closing. The cover design on the DVD display was developed using Adobe Photoshop CC 2022 software. Through this application, the design of images and text on the cover can be designed containing the title of the video media and the name of the researcher. Through this application, it is also possible to edit images and text. The cover design on the DVD is designed by selecting images according to the title of the media. The cover design shows an image of students exercising, with a title that is appropriate for grade I elementary school students. The use of fresh and striking colors attracts students' attention to watch the learning video.

The display on the learning video media consists of 3 parts, namely the opening, content, and closing. The video media is designed using 3 software, namely Adobe Premiere Pro Cc 2022, Adobe After Effect Cc 2022 and Davinci Resolve 2022. The opening display of the learning video media consists of an intro and title, with the intro displaying the Undiksha logo, animation, logo, and music. These three things then go through the editing stage to produce an interesting intro and give a good first impression to the audience. The display on the content of the learning video media consists of 6 parts, namely the technique of walking forward, the technique of walking fast, the technique of running forward, the technique of running backward, the technique of jumping forward, and the technique of jumping backward. The closing display of the video shows a combination of walking, running, and jumping movements that have been explained. The video display can be presented on [Figure 1](#), [Figure 2](#), [Figure 3](#), [Figure 4](#), [Figure 5](#), and [Figure 6](#).





Figure 1. Cover Design

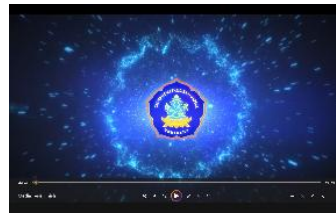


Figure 2. Intro View



Figure 3. Title View



Figure 4. Contents Section



Figure 5. Contents Section



Figure 6. Closing Section

The validity of learning video media can be measured through the accuracy of the information presented, the clarity of the concept delivery, and the relevance of the content to the learning objectives. When the information in the video can be accounted for and is in accordance with current facts, and is able to explain the concept well, then it can be said that the learning video media has high validity. Validity is also seen from the success in maintaining the interest and attention of viewers, and being able to motivate them to learn further. Therefore, the validity of learning video media is an important key in supporting the effectiveness of the learning process. the results of the video media products made by researchers will then be submitted to experts, namely learning media experts and learning material experts.

This study produced a video media product for learning PJOK on the combination of basic locomotor movement patterns, which was then submitted to two learning media experts, Dr. I Gede Margunayasa, S.Pd., M.Pd. and Prof. Dr. Ida Bagus Putrayasa, M.Pd., for validation on October 26, 2023. In addition, the product was also submitted to two learning material experts, Dr. I Ketut Semarayasa, S.Pd., M.Or. and Prof. Dr. I Wayan Suastra, M.Pd., for validation on November 3, 2023. The purpose of this study was to examine the validity of learning video media based on validation from media and material experts. The results of the validation of media and learning materials can be presented at Table 1 and Table 2.

Table 1. The Learning Media Validation Results

Expert I	Expert II	Criteria
1.0	1.0	Very High Content Validity

Table 2. The Learning Material Validation Results

Expert I	Expert II	Criteria
1.0	1.0	Very High Content Validity

The practicality of learning video media was conducted to determine the practicality in using the PJOK learning video media product for the combination of basic locomotive movement patterns for grade I elementary school students. The practicality test of the product was conducted by providing a questionnaire to assess the practicality of the learning video media. There were 4 field practitioners (PJOK teachers) involved, namely, Mr. I Made Mariyasa, S. Pd., Mr. I Gusti Putu Wirawan, S.Pd., I Nyoman Nastana, S.Pd and Mr. I Made Supartika, S.Pd. The results of the practicality test can be presented in Table 3.

Table 3. The Practicality Test Results

No	Field Practitioner	Score	Presentation	Category
1	Practitioner 1	67	89%	Very practical
2	Practitioner 2	87	87%	Very practical
3	Practitioner 3	69	92%	Very practical
4	Practitioner 4	71	94%	Very practical
<b>Average</b>			<b>90.5 %</b>	<b>Very practical</b>

Based on Table 3, it can be said that the PJOK learning video media product for the combination of basic locomotor movement patterns material gets a total average score of 90.5% which is categorized as very practical. Based on this, the PJOK learning video media for the combination of basic locomotor movement patterns material is very practical to use.

The next stage is the effectiveness test of the learning video media. The effectiveness of the media on the PJOK learning video media for the combination of basic locomotor movement patterns for grade I elementary school students is calculated using the t-test formula. There are several stages of prerequisite tests carried out, namely the normality test, the variance homogeneity test, and the hypothesis test (t-test). This analysis is used to measure the test results before and after using the learning media. Students are given a pre-test and post-test to evaluate their performance using the dependent sample t-test. The normality test for data distribution is carried out using the Shapiro-Wilk formula using the SPSS 24.00 for windows program. The results of the normality test can be presented in Table 4.

**Table 4. The Normality Test Results**

Groups	Kolmogorov-Smirnova			Shapiro Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Pretest	0.097	40	0.200	0.942	40	0.040
Posttest	0.102	40	0.200	0.949	40	0.072

Based on the normality test, the significance of the pretest data was 0.040 and the posttest was 0.072. This means that the significance data is greater than 0.05, which indicates that the pretest and posttest data are normally distributed. Furthermore, the homogeneity of variance test was conducted to find the level of homogeneity in two parties taken from the pretest and posttest. The homogeneity of variance test was conducted using the SPSS 24.00 for Windows program. The results of the homogeneity test can be presented in Table 5.

**Table 5. The Results of Homogeneity Test**

Parameters	Levene Statistics	df1	df2	Sig.
Learning outcomes Based on Mean	0.391	3	36	0.760

Based on the complete calculation, it is known that the significance value of 0.760 is greater than 0.05. This shows that the variance of the two groups is homogeneous. Based on the prerequisite test of data analysis, it was obtained that the pretest and posttest data were normal and the variance of the two groups was homogeneous. Furthermore, a dependent sample t-test was carried out with the SPSS 24.00 for windows program. The results of the t-test calculation can be presented in Table 6.

**Table 6. The Results of t-test Calculation**

Paired Groups	Paired Differences			t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Pair 1 Pre Post	-29.250	10.473	1.656	-17.664	39	0.000

Based on Table 6, the results of the t-test calculation obtained  $t_{count}$  of 17.664. While  $t_{table}$  with  $df = 39$  and a significance level of 5% is 0.2573. This means that  $t_{count}$  is greater than  $t_{table}$  ( $t_{count} > t_{table}$ ). The significance value (2-tailed)  $0.000 < 0.05$  indicates a significant difference between the initial and final variables. Thus, it can be seen that there is a significant influence on the differences in treatment given to each variable.

**Discussion**

Based on the research results, the characteristics of the developed learning video media can be seen from the video components, appearance and learning materials. The appearance of the learning video media consists of 3 parts, namely the opening, content, and closing. The design of children's learning media must be interesting and fun according to the characteristics of the child and be able to convey learning messages in children's locomotor activities. The learning media developed also adjusts to the conditions and developments of technology in education in the form of audio visuals, namely video. The most important thing is the material presented in the learning video media. The contents of the video media are packaged to suit the objectives to be achieved. For this reason, analysis of the problems that exist in schools is very necessary in developing a learning video media product.

Based on the results of the validity test, the developed learning video media has been valid. Validity in research states the degree of accuracy of the research measuring instrument to the actual content being measured. This means that the suitability of the learning video media to the indicators to be achieved is appropriate. The results of the assessment by this expert are then used as revision material to improve the quality of the learning devices that have been prepared. Learning devices that have been declared valid by the validator will then be continued with field trials in the next stage. Validation of learning media includes aspects such as rationale, objectives, materials, presentation methods and physical forms.

A media is said to be suitable for use if it has passed a feasibility test. Whether or not a media is suitable depends on the test results obtained. Feasibility testing (validation) has several assessment aspects that must be met by learning media. Before being tested for its feasibility, learning media must go through a validation process. Validation is carried out as a refinement of the learning media that is developed. Validation is carried out by experts in their fields, namely media experts and material experts (Hapsari & Zulherman, 2021; Mashuri & Budiyo, 2020). The validator is expected to be able to provide suggestions/input that can be used to improve the quality of the learning media being developed.

The developed learning video media has truly met the criteria for good learning media. The high media validity results were obtained because the media and material aspects presented in the media were in accordance with the characteristics and needs of elementary school students. Based on the analysis, it was found that the content/material aspect category was declared valid. This shows that the preparation of the material is in accordance with the needs analysis, the material presented is appropriate, up to date, and systematically arranged. The display media categorizes the valid category. This shows that the developed media has good media quality as a learning aid.

The tested media has been declared suitable for use and can be implemented on students. The results of the media validity were also obtained in previous research which stated that video-based learning media for locomotor movement material was suitable for use (Rahmadani et al., 2023; Dewi et al., 2021). Based on the results of previous studies and compared with the results of this study, the learning video media is declared feasible as a learning media by obtaining a high validity value. Thus, the learning video media can be continued to the next analysis stage, namely the practicality test and the effectiveness test.

Based on the analysis results, the developed learning video media is categorized as very practical. All aspects of practicality such as the aspect of interest, the aspect of material, and the aspect of language are categorized as very practical. Learning media is said to be practical if teachers and students who are users of the learning media state that the learning media is easy to use (Afnan et al., 2022; Milala et al., 2022). In terms of interest, the appearance of learning video media is made as attractive as possible. Learning video media is designed by combining video, text and intonation (audio visual) in the resulting media. Video media is designed by combining video displays, materials and sound so that it makes it easier for students to use or learn the material.

Variations in learning media, such as a combination of video, sound, and materials, can prevent student boredom. Videos equipped with sound, text, and supporting displays make learning more interesting and clear. This makes it easier for students to do or understand basic locomotor movement material. In terms of material, video media contains material on basic locomotor movement patterns where the material consists of several discussions, namely: 1) forward walking movement, 2) fast walking movement, 3) forward running movement, 4) backward running movement, 5) forward jumping movement, and 6) backward jumping movement. Video media is designed by combining the material with a video display of motion/(visual), sound/(audio) and text (title), so as to provide an interesting impression for students. In terms of language, the sentences used are simple sentences that are easy for students to understand.

The aim of the practicality stage is to find out how easy it is to use video media (Syafriati & Nelmira, 2023; Arianingsih et al., 2022; Irawan & Hakim, 2021). Based on the results of the analysis and explanation above, the developed video media that is proven to be practical means that video media is easy to use. The practicality of the media is supported by the technology used because students are close to technology, so students do not experience difficulties in using media with the help of technology such as android. In addition, in the modern era like today, android is one of the media that is very practical to use. This video media is a form of collaboration with technology that can be accessed by students on personal mobile phones.

The practicality of teaching media consists of two aspects, namely ease and usefulness (Nadzif et al., 2022; Faradayanti et al., 2020). The ease aspect is categorized as good. This proves that this learning media is easy to use, can be operated in various player applications, and is easy to maintain. In addition, the benefit aspect is also categorized as good. This shows that the media can facilitate students to master the material, help them independently, make students remember the material better, help students to focus,

make students interested in the material, and make students learn faster than usual according to student needs.

The effectiveness test shows that the developed learning video media is categorized as effective. This can be seen from the results of the t-test analysis showing a significant increase in students' understanding of basic locomotor movement pattern material before and after learning using video media, with a  $t_{count}$  value of 17.664. The main objective of this development is to provide a significant contribution to students' understanding of locomotor movement material. In addition, it is expected that this learning media will create a fun learning process.

The improvement of students' skills in the learning process can be seen from the learning outcomes obtained by using video tutorial learning media. The improvement of learning outcomes and students' positive attitudes towards learning will be an indicator of the effectiveness of video tutorial learning media in this context. Effectiveness is the suitability between the person carrying out the task and the intended target and how an organization succeeds in obtaining and utilizing resources in an effort to realize operational goals (Naldia et al., 2023; Alim, 2017).

Locomotor movement is a basic movement skill that moves the body from one place to another, such as running, walking, jumping forward, jumping backward and so on (Sari et al., 2019; Pradipta, 2017). PJOK uses physical activities such as playing and exercising which are applied in learning (Gholy et al., 2021; Mu'arifin & Kurniawan, 2021). Therefore, physical activity through playing and exercising must be emphasized in learning in elementary schools.

One of the technologies that can be utilized in the field of education is learning video media. In the field of education, learning video media is one form of audio-visual media that aims to achieve maximum learning outcomes. Currently, almost all educational and learning activities must integrate technology with the right strategy (Wahyudi, 2024; Sakti, 2023). PJOK should not rely on direct activities alone, but needs to develop practical learning in the form of media. Learning video media can provide a more realistic model to students so that students can play an active role in the learning process.

The results of this study are in line with several previous studies which stated that learning videos are effective for stimulating students' locomotor abilities (Angelia & Kusmiyati, 2024; Dewi et al., 2021). Previous research states that audio-visual media shows good and effective results in sports learning (Febrianto et al., 2023; Naldia et al., 2023; Lestari et al., 2021; Ilhamri & Marlina, 2020). The advantages of videos include being fun for students, being able to present concrete information, and being able to present learning experiences that students would not be able to get outside the school environment.

These three advantages make video considered effective in improving students' ability to understand concepts, increasing students' motivation to learn and being able to improve students' learning outcomes. In addition, video media is also considered effective for use at elementary school level because these advantages can meet the learning needs of elementary school students who are in the concrete operational phase (Lubis, 2023; Lestari et al., 2021). The selection of the use of video learning media is also supported by the results of previous research which states that video learning media is effective for use in the learning process because it can increase student motivation and learning outcomes (Marliani, 2021; Guswiani et al., 2018).

Based on the results of previous research and compared with the results of this study, the learning video media is declared suitable as a learning media by obtaining a high effectiveness value with a strong influence on student understanding. Innovation of PJOK learning video on basic locomotor movement pattern combination material is declared feasible as a learning resource and effective. This research has implications for improving elementary school students' understanding of basic locomotor movement combination. The limitation of this research is that it only focuses on basic locomotor movement combination material in PJOK learning for grade I elementary school students. Further research can develop similar media with different materials or subjects. Further research can also expand the research subjects to produce more optimal research.

#### 4. CONCLUSION

The PJOK learning video on the combination of basic locomotor movement patterns for grade I students showed valid, practical, and effective results for the understanding of grade I elementary school students. It can be concluded that the innovation of the PJOK learning video on the combination of basic locomotor movement patterns for grade I students is declared feasible as a learning resource and effective. This study was able to motivate colleagues who have the same problems in PBM. In the future, teachers are advised to design learning with videos according to student needs, while the principal motivates teachers in making videos. Other researchers are expected to be able to use this study as a reference for developing more innovative research.



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