JUARA: Jurnal Olahraga
E-ISSN 2655-1896 ISSN 2443-1117
https://doi.org/10.33222/juara.v7i3.2205

PJOK Learning: How to Apply Animation Media Based on Contextual Approach?

Ari Gunardi[1*], Elsa Ariestika[2]

[1,2] Universitas Primagraha, Jl. Trip Jamaksari No.mor 1A, Kaligandu, Serang City, Banten 42111, Indonesia
*e-mail: ariestikaelsa@gmail.com

Info Artikel

Article History:

Received 19 July 2022

Approved 15 Ocober 2022

Published 20 October 2022

Keywords:

PJOK Learning, Animation Media, Contextual

Abstract

This study aims to determine the application of contextual approach-based animation media in Physical, Sport, and Health Education (PJOK) learning for fourth-grade elementary school students. This research is a development method that refers to the ADDIE model. ADDIE development research consists of five stages, namely (1) Analysis, (2) Design, (3) Development, (4) Implementation, and (5) Evaluation. The data analysis technique of this research uses the results of the review of learning content experts, learning design experts, and media experts in the form of input, feedback, criticism, and suggestions for improvement contained in the questionnaire and the percentage score. The results showed that the learning animation media based on the contextual approach PJOK for fourth-grade elementary school students produced learning products suitable for the learning process. Thus, this study concludes that by learning resources using animated media based on a contextual approach, students are more enthusiastic by having a high interest in learning.

✉ Alamat korespondensi: Jl. Trip Jamaksari No.mor 1A, Kaligandu, Kec. Serang, Kota Serang, Banten

E-mail: ariestikaelsa@gmail.com

INTRODUCTION

The development of science and technology (IPTEK) is increasingly passive, so humans must be adaptive to think critically and work together (Mulyani & Haliza, 2021). Through education, humans are in the process of developing their knowledge. Education can be used as a place to develop the human personality gradually. Education influences human life to survive and interact with a group of other humans so that their needs can be met (Tutus & Hermawan, 2014). Given the importance of education in human life, developing human resources (HR) is carried out by increasing knowledge, skills, and attitudes so that they can adapt to their environment (Agus et al., 2021). Without

human education, it is challenging to develop. Thus, education should be appropriately directed to create qualified human beings (Zhu et al., 2017). One of the subjects underlies the development of science and technology is the subject of Physical Education, Sports and Health (PJOK).

Physical Education for Sports and Health (PJOK) is an education that uses the physical as a form of exercise that benefits students by maintaining health and physical fitness (Brownell, 2020). Meanwhile, Ensign et al. (2017) explained that physical education is an educational process with various activities carried out systematically and consciously to gain physical abilities and skills, motivation and character formation (Hawkins, 2018). With physical education, students can grow and develop well mentally, socially and emotionally so that they run in a balanced way. They can also behave in a healthy and clean life in their daily lives. Physical education is usually carried out offline in the field with practical activities. Thus, facilities and infrastructure are needed, such as learning media.

Learning media, as one of the components of the learning system, must be by the learning components so that their function is optimal in learning activities (Selwyn & Oliver, 2019). Therefore, learning media is needed in the learning process so that teachers can convey material more clearly, and easily understand and visualize something abstract so that students more readily accept the material well (Selwyn et al., 2017). The media will make it easier for teachers to deliver learning materials (Selwyn & Oliver, 2019). One of the learning models that can support the implementation of learning is using animation media.

Yeh et al. (2019) framed that media in the PJOK learning process can increase students' motivation and learning outcomes because they could explain something complicated or complex through audio-visual stimuli, which ultimately produces better results for tasks such as remembering, recognizing, recalling and relate facts and concepts. Learning by utilizing animation media can make PJOK learning practical, fun, and not boring so that it speeds up the process of delivering material to students (Hickey, 2020). In addition to involving animation media in learning for elementary school students, it needs to be carried out by involving the daily experiences of students so that learning becomes meaningful (Ge, 2019). The approach that can be used is the contextual approach.

The contextual approach is a learning concept that helps teachers relate the material they teach to students' real-world situations and encourages students to connect their knowledge and its application in daily life (Susanto, 2020). Besides, the contextual approach emphasizes the ability of students to construct their knowledge and find out for themselves so that students can explore their thoughts in gaining experience and knowledge they learn (Prabawa et al., 2021). There are seven contextual learning characteristics:

constructivism, questioning, inquiry, learning community, modelling, reflection and authentic assessment (Maryati, 2018). Through a contextual approach, learning is not only obtained from teacher to student by memorizing concepts detached from real life but also emphasizes students in facilitating the search for abilities in what they are learning (Sugandi & Bernard, 2018). This allows students to relate the material studied to everyday life. The success of PJOK learning is supported by several supporting components in the learning process, such as teachers, students and learning media; these three components enable effective learning (Silva et al., 2019).

This research aligns with research on developing PJOK learning applications for using audio-visual media for elementary school students. At the same time, the research results show that using learning applications is practical and feasible, especially in PJOK learning (Tutus et al., 2014). Furthermore, research conducted on the development of learning applications to assist students in recognizing basic locomotor and non-locomotor movements based on a contextual approach shows that application development is suitable for development and is suitable for use, especially in PJOK learning for elementary school students (Chen & Ennis, 2017). Thus, in the contextual learning model, contextual-based animation media is not developed in PJOK subjects. Learning animation media was chosen because it can explain a material concept that is abstract to be more concrete and can make learning more enjoyable. The advantage of animated media based on a contextual approach is to present material adapted to students' characteristics so that this research can help students who have difficulty understanding PJOK learning materials.

METHODS

This type of research uses descriptive quantitative with a development method that refers to the ADDIE model. ADDIE development research consists of five stages, namely (1) Analysis, (2) Design, (3) Development, (4) Implementation, and (5) Evaluation.

Data collection techniques using observation, interviews, and questionnaires. Observations and interviews are used to find out the problems that are happening. This study used questionnaires to determine student needs and measure the feasibility of animated media developed through *reviews* of learning content experts, learning design experts, learning media experts, individual trials and small group trials. The instrument used in this study is a questionnaire sheet. Questionnaire sheets were used to collect data related to *reviews* of learning content experts, learning design experts, learning media experts, individual trials and small group trials.

The data analysis technique used in this study is the method of qualitative descriptive analysis and quantitative descriptive analysis. This qualitative descriptive analysis technique

was used to process data from the *review* of learning content experts, learning design experts, and media experts in the form of input, responses, criticism, and suggestions for improvement contained in the questionnaire. The results of this data analysis are then used to revise the developed product. Quantitative analysis techniques change the questionnaire data, which is still in the form of scores, into the percentage of responses from the subjects studied. In this study, quantitative descriptive analysis was used to process qualitative data obtained through questionnaires in the form of scores using a Likert scale for positive and negative statements totalling four assessments, namely Strongly Agree (SS), Agree (S), Disagree (TS), Strongly Disagree. Agree (STS). Then in finding the percentage of the questionnaire score by comparing the total number of answers given by the respondents with the maximum score, then multiplied by 100% by the formula from Marvasti (2018).

The score criteria described below, as the formula given by Marvasti (2018), are set to give meaning to the percentage score.

Table 1 Conversion Score Level of Achievement Scale 5

No.	Achievement Level (%)	Qualification	Remarks
1.	90 - 100	Very Good	No need to revise
2.	75 -89	Good	Slightly revised
3.	65-74	Enough	Revision sufficiently
4.	55-64	Less	Many things are revised
5.	0-54	Very Less	Repeat making

FINDINGS AND DISCUSSION

The results of this study are animated media based on a contextual approach to learning PJOK for elementary school students using ADDIE development consisting of five stages, namely (1) Analysis, (2) Design, (3) Development, (4) Implementation, (5) Evaluation.

Findings

The findings in the first stage were analysis carried out by analyzing the needs of fourth-grade students at Al-Azhar 10 Islamic Elementary School, Serang City, regarding the problems faced in learning by distributing questionnaires to students and conducting interviews with fourth-grade teachers at

Al-Azhar 10 Islamic Elementary School, Serang City. The second stage designs, the activities carried out are designing PJOK learning media using animation based on a contextual approach starting from collecting learning materials, core competencies, essential competencies, learning indicators, and learning objectives. The information obtained at the analysis stage is used to design *storyboards* and plans (RPP) and choose *software* animation media *filmora*. The third stage is development. At this stage, the animation media began to be made by the

design stage, with the product development process carried out starting with (1) creating a display design using *Adobe Illustrator CS6 software*, making the initial application display, button making, material display design with animation media and evaluation display. (2) create two-dimensional objects using *adobe illustrator CS6 software* in apk format. If the learning application has been developed, the next stage is carrying out product trials on test subjects, including learning content experts, learning designs, learning media and students through individual trials. The trial was conducted to determine the level of feasibility of the product that has been developed using a questionnaire instrument. Below is the percentage score of the animation media application product test results.

Table 2 Trial Results of Using Animation Media Products on PJOK Learning

No.	Test Subject	Results (%)	Qualifications	Information
1.	Learning Content Expert	90,10	Very Good	No need to revise
2.	Learning Design Expert	94,05	Very Good	No need to revise
3.	Learning Media Expert	87,22	Good	Slightly revised
4.	Individual Trial	90,44	Good	No need to revise

Based on the table of product trial results above, the results of the learning content experts with a percentage of 90.10% are excellent qualifications. The learning design expert's percentage result was 94.05%, with excellent qualifications. Then, learning media experts obtained a percentage of 87.22% with suitable qualifications. Moreover, in individual trials, the percentage results were 90.44% with excellent qualifications. So, the conclusion of this study shows that the PJOK learning animation media developed for fourth-grade elementary school students is feasible to use in the learning process.

Discussion

This research is the development of animation media based on a contextual approach in PJOK learning for fourth-grade elementary school students. PJOK learning is one of the essential lessons in the process and stages of fundamental movement. In learning PJOK, students are required to have good movement and understanding skills. Thus, based on the results of this development research, the test subjects obtained excellent qualifications, so the PJOK learning animation media with a contextual approach was feasible to use in the learning process.

PJOK learning animation media based on a contextual approach can improve students' understanding of the learning process and movement skills (Hartati, 2020). This is agreed Aryanti et al. (2020) believe that animation media is an optimal teaching material for students with learning videos and exciting materials. Animated media, in general, have the integrity of the values of a contextual approach that aims to make learning more meaningful and create a pleasant atmosphere (Hobbs et al., 2019). Through a contextual approach, learning materials are tied to real-world situations and encourage students to make connections between knowledge and its application in everyday life.

Research produced by Atiles & Pinholster (2019) states that learning with a contextual approach will become more meaningful and firmly embedded in students' memories so that it will not be easily forgotten and will increase students' skills and activities. In developing PJOK learning animation media based on a contextual approach for class IV SD, the content of the material studied is stated by the essential competencies, indicators, and learning objectives that have been set. This aims to ensure that the material presented to students is to their needs and is related to the curriculum. Conformity between learning content and objectives is essential in developing media to achieve maximum learning quality (Tutus et al., 2014).

The contextual approach in PJOK learning animation media is feasible for learning. This shows that the enthusiasm of students in learning increases; a promising delivery strategy involving contextually material elements, both animated images and animated videos, has a practical and systematic impact on the delivery of material by facilitating and increasing students' enthusiasm in understanding learning material and performing movement skills (Trout & Christie, 2017). This qualification with excellent results is reflected through the appropriate use of elements such as text, images, sound, colour, and animation. Sala et al. (2017) explained that using animation in videos would make the presentation more exciting and motivating, with moving images in attractive colours that can attract students' attention to participate in learning. The presentation of animated images can benefit readers and make students more interested in learning (Kramtsova, 2019). This shows that using text, images, sound, colour, and animation in this learning video is appropriate and can provide learning messages to increase student enthusiasm for learning (Prabawa et al., 2021).

Previous research findings stated that learning animation media could make it easier for students to understand the material presented by the teacher (Souto et al., 2017). Meanwhile, Selwyn & Oliver (2019) showed that learning videos could increase students' enthusiasm for learning. Moreover, previous research findings stated that learning through animation media makes students feel happy with the display of pictures and videos based on student life at school that feels real in learning (Azzajjad et al., 2021). By the existence of PJOK learning animation media based on this contextual approach, it can facilitate students in learning and understanding the material well and following examples of each animation media movement which is equipped with pictures, learning videos, and texts that can attract student's attention and get students motivated in the process study (Rakiyah, 2019).

CONCLUSION

Based on the results of research and discussion in the research that has been described, it can be concluded that (1) with the existence of animated learning media based on a contextual approach to learning PJOK for fourth-grade elementary school students produces learning products that are suitable for use in the learning process. (2) with learning

resources using animated media, students are more enthusiastic with high learning interest.

The product that has been developed has advantages and limitations in this study, namely the advantages of animation media developed through a contextual approach to learning PJOK for fourth-grade elementary school students, which has content that attracts students' attention. In addition, the development of media also refers to the theory of learning design so that it is optimally carried out for the learning process.

The limitation of this study is the use of animation media made specifically based on a contextual approach for fourth-grade elementary school students so that it can not be used for the class. Thus, the implication in this study is that the animation media developed can facilitate students in learning, especially in PJOK learning.

REFERENCES

Agus, Rachmi, Marssheilla, Fahrizqi, Bagus, Eko, Yuliandra Rizki, Gumantan, A. (2021). The Learning Motivation and Physical Fitness of University Students During the Implementation of the New Normal Covid-19 Pandemic. *JUARA: Jurnal Olahraga*, *6*(1). https://doi.org/https://doi.org/10.33222/juara.v6i1.1184 The

Aryanti, S., Hartati, & Syafaruddin. (2020). Learning of badminton model through animation video on physical education students. *International Journal of Human Movement and Sports Sciences*, *8*(6), 47–50. https://doi.org/10.13189/saj.2020.080708

Atiles, J., & Pinholster, L. (2019). Student Teaching: Reflections of a Relentless Journey. *Journal of Early Childhood Teacher Education*, *34*(4), 308–319. https://doi.org/10.1080/10901027.2013.845632

Azzajjad, M. F., Tendrita, M., & Ahmar, D. S. (2021). Effect of animation and review video making (arvima) in non-classical learning model on independent learning and students' learning outcome. *Linguistics and Culture Review*, *5*(S3), 967–976. https://doi.org/10.21744/lingcure.v5ns3.1657

Brownell, C. (2020). The Preparation of Teachers in Health and Physical Education. *American Physical Education Review*, *34*(5), 278–280. https://doi.org/10.1080/23267224.1929.10652386

Chen, A., & Ennis, C. D. (2017). Goals, Interests, and Learning in Physical Education. *Journal of Educational Research*, *97*(6), 329–339. https://doi.org/10.3200/JOER.97.6.329-339

Ge, Z. (2019). Does a mismatch between learning media preference and received learning media bring a negative impact on Academic performance ? An experiment with e-learners. *Interactive Learning Environments*, *0*(0), 1–17. https://doi.org/10.1080/10494820.2019.1612449

Hartati, S. (2020). The Effectiveness of The Powerpoint Assisted SQ4R Model on Reading Skills In Class V Students. *Journal of Education and Management Studies*, *2*, 1–4.

Hawkins, A. (2018). Pragmatism, purpose, and play: Struggle for the soul of physical education. *Quest*, *60*(3), 345–356. https://doi.org/10.1080/00336297.2008.10483585

Hickey, A. (2020). *Generation animation : participatory action research and intergenerational pedagogy Generation animation : participatory action research and intergenerational pedagogy*. https://doi.org/10.1080/25741136.2020.1769952

Hobbs, R., Cabral, N., Ebrahimi, A., Yoon, J., & Al-Humaidan, R. (2019). Field-Based Teacher Education in Elementary Media Literacy as a Means to Promote Global Understanding. *Action in Teacher Education*, *33*(2), 144–156. https://doi.org/10.1080/01626620.2011.569313

Kramtsova, E. E. (2019). Computer Graphics and Animation as a Formative Medium. *Journal of Russian & East European Psychology*, *35*(3), 81–84. https://doi.org/10.2753/rpo1061-0405350381

Marvasti, A. (2018). Research methods. *The Cambridge Handbook of Social Problems*, *1*(3), 23–37. https://doi.org/10.1017/9781108656184.003

Maryati, I. (2018). Improving Statistical Reasoning Ability of Junior High School Students Through Contextual Learning. *Mosharafa: Jurnal Pendidikan Matematika*, *6*(1), 129–140. https://doi.org/10.31980/mosharafa.v6i1.300

Mulyani, F., & Haliza, N. (2021). Analysis of the Development of Science and Technology (Science) in Education. *Jurnal Pendidikan Dan Konseling (JPDK)*, *3*(1), 101–109. https://doi.org/10.31004/jpdk.v3i1.1432

Prabawa, I. K. R., Satyawan, I. M., & Spyanawati, N. L. P. (2021). Development of contextual based PJOK video game for grade 1 elementary school students. *Jurnal Olahraga Pendidikan Indonesia (JOPI)*, *1*(1), 11–26. https://doi.org/10.54284/jopi.v1i1.3

Rakiyah, S. (2019). The Impact of Animation Media on the Character of. *Komunikologi: Jurnal Pengembangan Ilmu Komunikasi Dan Sosial*, *3*(1), 29–35.

Sala Ripoll, C., Oparka, R., Campbell, A., & Erolin, C. (2017). The cell cycle: development of an eLearning animation. *Journal of Visual Communication in Medicine*, *40*(1), 13–20. https://doi.org/10.1080/17453054.2017.1289059

Selwyn, N., Eynon, R., & Potter, J. (2017). A decade of Learning Media and Technology: looking back and looking forward. *Learning, Media and Technology*, *42*(2), 127–129. https://doi.org/10.1080/17439884.2017.1324483

Selwyn, N., & Oliver, M. (2019). Learning, media and technology: Looking backwards and moving forward. *Learning, Media and Technology*, *36*(1), 1–3. https://doi.org/10.1080/17439884.2011.557916

Silva, R. C. A., e Silva, V. L. de F. F., & Silva, A. P. (2019). Distance learning for teaching in physical education. *Moritz. Revista de Educacao Fisica*, *25*(1), 1–5. https://doi.org/10.1590/s1980-6574201900010002

Souto-Manning, M., & Price-Dennis, D. (2017). Critically Redefining and Repositioning Media Texts in Early Childhood Teacher Education: What If? And Why? *Journal of Early Childhood Teacher Education*, *33*(4), 304–321. https://doi.org/10.1080/10901027.2012.732669

Sugandi, A. I., & Bernard, M. (2018). Application of Contextual Approach to Mathematical Comprehension and Communication Ability of Middle School Students. *Jurnal Analisa*, *4*(1), 172–178. https://doi.org/10.15575/ja.v4i1.2364

Susanto, R. (2020). Contextual-Based Long Jump Learning in Grade V Elementary School Students. *Physical Activity Journal*, *2*(1), 70. https://doi.org/10.20884/1.paju.2020.2.1.3287

Trout, J., & Christie, B. (2017). Interactive Video Games in Physical Education. *Journal of Physical Education, Recreation & Dance*, *78*(5), 29–45. https://doi.org/10.1080/07303084.2007.10598021

Tutus Eshananda Hars, Hermawan Pamot, R. (2014). Learning Model of Physical Education Locomotor Basic Learning in Grade III Primary School. *Journal of Physical Education, Sport, Health and Recreation*, *4*(2), 102–108. https://doi.org/10.1080/17408989.2020.1799967

Yeh, T. K., Tseng, K. Y., Cho, C. W., Barufaldi, J. P., Lin, M. S., & Chang, C. Y. (2019). Exploring the Impact of Prior Knowledge and Appropriate Feedback on Students' Perceived Cognitive Load and Learning Outcomes: Animation-based earthquakes instruction. *International Journal of Science Education*, *34*(10), 1555–1570. https://doi.org/10.1080/09500693.2011.579640

Zhu, X., Ennis, C. D., & Chen, A. (2017). Implementation challenges for a constructivist physical education curriculum. *Physical Education and Sport Pedagogy*, *16*(1), 83–99. https://doi.org/10.1080/17408981003712802