

DEVELOPMENT OF A PHYSICAL ACTIVITY LEARNING MODEL MULTIMEDIA BASED IN FLOOD PRONE AREAS

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ABSTRACT

The background to this research comes from a school that adapts to natural situations, where sometimes when the tide is high it will submerge the entire school yard, causing physical education learning activities to be hampered. Based on survey results from the past 2 years, there are indeed several schools in the Banjar Regency area that have been submerged by high tides/are prone to flooding. The aim of this research is to create a learning model that is suitable for use during high tide by testing several learning models that have been designed related to multimedia-based physical activities. The method used in this research is research and deployment (RnD) with the ADDIE design (Analysis, Design, Development or Production, Implementation or Delivery and Evaluations). The research instruments used are tests and measurements, including testing learning models and finding out the results of validity tests and effectiveness tests. The research results show that the peer teaching and cooperative learning models are more dominantly used in flood conditions, but other variations of learning models also do not rule out the possibility of being used in post-floods with a usage intensity level of 73.5% for the peer teaching model and 73.1% for the cooperative model. dominantly used by physical education teachers at SMPN 2 Martapura Timur. In this way, these two learning models will provide activities for students with multimedia tools.

Keyword: physical activity, multimedia, physical education

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INTRODUCTION

Basic education is the most important thing in human life wherever we are. In the opinion of (Lai, 2022), education is guidance that is carried out consciously by educators for students with the aim of forming the main personality physically and spiritually. It is very clear based on what was put forward by the opinion of (Suriadi), it states that education is very closely related to the physical and spiritual and forms the teacher's personality, in this case the responsibility is very big to support students even seen from the geographical environment where if the place is not possible to do physical activity. In other cases, the geographic environment is at the lowland level and prone to flooding, making it impossible to carry out active activities in the field. (Findayani, 2018) It is very important that the relationship between teachers and students is able to absorb the subject matter delivered by an educator. It also requires expertise in teaching and experience of the teacher. A learning model is a plan or pattern that we can use to design face-to-face learning in the classroom or in a tutorial setting and in constructing learning materials. (Arfiani, 2019) Researchers raise problems that really arise in the field to be researched and analyzed to find solutions to break through solving these problems. By designing a multimedia-based physical activity learning model for flood-prone areas in Banjar Regency.

The researcher's interest in developing learning models, especially in the physical activity of students aged 13-15 years, namely the middle school period. The character of junior high school students has critical thinking skills in carrying out learning. (Martawijaya, 2015). The character of junior high school students also has a contextual character formation in learning. (Ibrahim, 2018). The physical activity developed at school influences the emotional intelligence of children. (adu, 2021). In developing maximum achievement and learning outcomes in schools, the emotional intelligence possessed by a student is one of the determinants of



student success that must be possessed. (Riyanto, 2019). The concept of learning or activity that is appropriate to the age of growth and development, through appropriate physical activity and according to the period is expected to have an impact on optimal physical growth and emotional development. (Burhaein, 2017). As a teacher, you must understand the challenges, abilities, and resources of the teacher in teaching students who have reading difficulties, the importance of leadership in carrying out learning according to research. (Adao, 2023). Physical interactivity in learning multimedia varies from the simplest to the most complex. The advantage of multimedia in interactivity is that this media is able to deeply force users to interact with the material both physically and mentally. (Oka, 2022). Learning media results from a clear culture for the process of learning and learning activities. This is because all processes from the beginning to the completion of the learning process must reflect the learning process itself. The benefit of multimedia itself is that the media is able to provide varied stimulation to our own brains. (Tittings, 2016). Able to overcome the limitations of student experience. The media is also able to cross the boundaries of the classroom and many things that students cannot experience directly. Media allows for direct interaction between students and the learning environment. Media produces uniformity of observation. (Kurniati, 2018).

Previous research activities were observed which stated that research on developing a physical activity learning model based on local culture in flood-prone areas of Banjar district had the aim of assisting physical education teachers in increasing knowledge about learning designs related to physical activity with local wisdom. (Indah, 2022) Schools can also provide solutions in carrying out physical activity. Students can use the learning model design resulting from this research later. Adding insight to both teachers, schools and researchers about learning design in flood-prone areas in Banjar Regency. The difference between previous research and the update in the title of developing a multimedia-based physical activity learning model in flood-prone areas is the effort to provide material models to teachers, students and schools in providing special development of physical activity movements with multimedia in flood-prone areas at the SMPN 2 Martapura school. Education units need to improve the quality of the use of audio-visual media so that students are more effective and motivated in learning. (Lestari, 2021)

METHOD

The method used in this research is research and deployment (RnD) with the ADDIE design with a 5-Step design (Analysis, Design, Development or Production, Implementation or Delivery and Evaluations) (Yuniarti, 2022). Design in research and development is based on systematic data derived from practice. In a descriptive design describing the current status of a variable or research phenomenon does not start with a hypothesis but usually develops after data collection. Development research in which a less effective multimedia-based learning model is re-developed so that it can be suitable for use in flood-prone areas.

RESULTS AND DISCUSSIONS

This research analyzes data collected from frequency distributions and arithmetic averages. The scale used is the Likert scale on the questionnaire to describe the extent to which physical education teachers view the multimedia-based learning model used, especially in flood-prone areas, which has been carried out in 5 steps including analysis, design, development, implementation and evaluation.

The results of research that has gone through large-scale tests show that the peerteaching learning model is more dominantly used with a usage intensity level of 62% with interactive multimedia in flood conditions. However, the cooperative learning model can also be used after floods with an intensity of 30% with multimedia kits for physical education teachers at SMPN 2 Martapura Timur. Thus, these two learning models will provide physical activity to students with multimedia aids. The results of the learning method using multimedia are shown in table 3.

Table 1. Percentage of Learning Models

Models	Multimedia	Percentage %
Peer Teaching	Interaktif	75.3
Kooperatif	Kits	72.1
Other	Other	0

Description: Tabulated data on physical activity using multimedia with two learning models

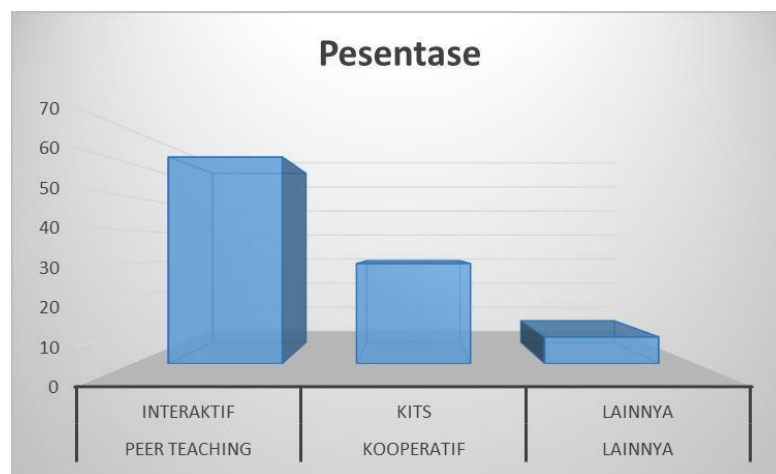


Table 2. Criteria for Assessment of Effectiveness

Interval Percentage Effectiveness (P)	Kriteria
P≤40%	very ineffective
41%≤P≤60%	ineffective
61%<P≤80%	Effective enough
81%<P≤90%	Effective
91% < P ≤ 100%	very Effective

Source : Sondang P. Siagian, 2001.

Based on the data above, the use of peer teaching and cooperative learning models based on multimedia, either interactive or kits, can activate students' physical activity and can also be used during emergencies, where the school is flooded. Other things that influence student activity are the teacher's ability to create an enthusiastic atmosphere for students, even if at times learning is not optimal due to natural factors.



Picture 1. Results Chart

Furthermore, to find out the responses or responses of physical education teachers to the 2 learning models using multimedia that were developed and intended for flood-prone areas in the Banjar Regency area. In the following, the researchers presented the results of the responses from physical education teachers to the learning model developed in Table 4 below:

Table 3. Response Results from Physical Education Teachers

	Frequency	Valid Percent	Criteria
Valid			
Koopertaive	75	72.1	Effective enough
Peerteaching	68	75.3	Effective enough
Total	143		

CONCLUSION

The results of this study are one of the major research problems in the world of education, where both schools and physical education teachers have difficulty dealing with natural factors that affect physical activity in PJOK learning. With the results of the development of learning models that have been tried out, the results can be used for PJOK teachers in flooded school situations. The peer teaching learning model with interactive multimedia is very dominant in terms of being used for students' physical activities with a yield of 62%. Then not far from the cooperative learning model with multimedia kits that can be used for students but



only by 30. Other things related to 8% such as boredom, boredom, and students' alertness in dealing with unusual situations in these two learning models. Future researchers' suggestions are for PJOK schools and teachers to continue to establish partners with any party so that they work together, and have a lot of experience in learning at school.

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