Development of Audio Visual-Based Media for Floor Gymnastics Materials
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Abstract
This study aims to obtain a product in the form of Audio Visual-Based Media Development for Floor Gymnastics for Class VI Elementary School Students. The development of floor gymnastics products to be applied as learning materials for class VI students is very important considering the COVID-19 pandemic situation has not ended and students are still learning from home. The research design used is development research (RnD) with Thiagarajan theory using research and development steps with 4 D, namely define, design, development, and dissemination. Data collection techniques are carried out through the product development stages. The product development stage is carried out with the results of the FGD of experts related to the development of learning media products from home on floor exercise material. The results of the study were obtained through the results of FGDs and the validation of experts related to the development of video-based media products. The stage of obtaining video feasibility data that can be applied as a research product during the COVID-19 pandemic is to validate content and structure. Validation is carried out by Floor Gymnastics Sports Experts and IT Experts. The research data are instrument data and 95% of the media have feasibility as floor gymnastics media. The conclusion in this study is that the product is declared feasible by experts in floor gymnastics and media (IT) and can be applied to sixth grade elementary school students. The product is developed in MP4 format that can be played on video applications, namely VLC and Windows Media Player. The development of audio-visual-based media as a medium for learning from home is very much needed, especially in the COVID-19 pandemic situation, where students can easily see technical references to floor exercise material as contained in basic and core competencies..

Keywords: Development, Media, Floor Gymnastics

Introduction
Sport is a physical activity that is a game that is carried out in a planned manner so as to produce an achievement. In improving the performance of an athlete, it is necessary to have a process to support the achievement of these goals, including training, motivation, and a balanced lifestyle. From this, it is necessary to have cooperation and sincerity created from various parties as sports personnel such as coaches, managers, and medical professionals, nutritionists or other names that are in accordance with their specificity and participate in organizing sports activities.

One of the determining factors in achieving sports achievement is the fulfillment of physical components, which consist of strength, speed, agility and coordination, energy, muscle endurance, heart and lung workability, flexibility, balance, accuracy and exercise health (M. Sajoto , 1995). Physical activity is the activity of organs developed with the aim of providing added value in the form of improving the physical quality, welfare, and dignity of the individual human being. Physical activity can have an influence on various aspects of life such as psychological, social, economic, cultural, political and biological functions. On biological functions, physical activity is a modulator with a broad spectrum of influence and can occur at various levels of function.

One of the implementations of physical activities is implemented through physical sports and health education (PJOK) which is carried out in schools. One of the materials applied
is floor exercise. Gymnastics is a physical activity with motion objects in all parts of the body that are used as a means to achieve a good degree of health (Utomo et al., 2012). The movements contained in gymnastics are related to the body's metabolism so that they are able to create physical fitness with aspects of regular, measurable, and proportional to body condition. Movement in gymnastics has an impact on inhibiting the increase in sympathetic nerves, so that the amount of hormones that cause body dysregulation can be reduced. The parasympathetic nervous system will slow down or weaken the work of the body's internal organs, so that it can train metabolism for the better (Wulandari, 2006).

The Federation International de Gymnastique (FIG) divides gymnastics into six groups including artistic gymnastics, sports rhythmic gymnastics, acrobatic gymnastics, sports aerobics, trampoline gymnastics, and general gymnastics (Widowati & Rasyono, 2018). Gymnastics learning that is applied in the course has competence in the ability of students to apply gymnastic movements, is able to provide assessments and create a series of movements that are in accordance with the development of students. Elements contained in the gymnastics course are the basic movements of floor gymnastics including handstand, headstand, kayaking, candle stance, and a series of basic movement competencies.

The various types of floor exercise include: forward roll, backward roll, tiger spring, hand stand overslag, wheeling, squat jump, round off., flexing arms backwards (flik flak), knee balance rolling (squat roll), straddle jump, standing with head (kopstand), kayaking (brug), wax stance, forward somersault (Summer vault), backward somersault (Back Summer vault), bolster elastic (roll kiep), jump fish (snuck). Gymnastics material in the learning of Physical Education, Sports and Health (PJOK) requires application to provide the most effective learning experience if the learner/person experiences/acts directly and actively in the learning environment. Providing broad opportunities for students to see, hold, feel, and activate more of their senses, and express themselves will build understanding of their knowledge, behavior, and skills. Therefore, the main task of educators/teachers is to condition a learning experience situation that can stimulate or stimulate the senses and curiosity of students.

Based on this, it is necessary to develop learning media that can be used by elementary school students and used as learning media by teachers. The development of learning media that will be developed is audio-visual-based learning media which in general can function as teaching media based on the COVID-19 pandemic and PPKM in Medan City.

Audio-visual-based student learning media will be developed based on the material found in elementary schools, including the floor gymnastics material, there are competency achievements of the front roll, back roll, and elastic roll technique. The media will also be adapted to the character of elementary school students, namely combining movement techniques, so that students have an interest when demonstrating floor exercise material with a distance learning system Sinurat, A. F., & Dewi, R. (2020), Sinuraya, E. A. S., & Sari, D. M. (2021), Sinuraya, J. B. (2020), Utama, D. W., & Sari, D. M. (2021), Utama, D. W., & Sari, D. M. (2021)

Based on the information above, it can be concluded that in implementing a comprehensive learning process for floor exercise materials during the Covid-19 period, the researchers will conduct research on the development of audio-visual-based learning media with the title "Development of Audio-Visual-Based Media for Floor Gymnastics for Class VI Students. Elementary School" which is planned to be implemented can be done independently in their respective homes.

**Methods**

The research design applied related to the research title Development of Learning Media for Floor Gymnastics Materials for Digital-Based Elementary Schools was to use research and development (RnD) research methods. The research was conducted to develop a
form or a learning media for floor exercise material which was applied at the elementary school level. The RnD method functions as a product development procedure in accordance with research needs (Sugiyono, 2016: 28). The research activity is to determine the basic techniques of elementary school floor gymnastics.

The research procedure in developing audio-visual media is carried out by research to produce designs and development to create and test the resulting products. The series of procedures starts with potential or problems which, if tricked, will be useful so that they have added value (Sugiyono, 2016: 47).

Source of research data aims to collect data from the stages of product development. The data obtained comes from two parts, namely: 1) primary data, namely data that directly gets data. The primary data in this study was through the process of researcher observation and interviews in the product trial process. 2) secondary data, namely data that does not directly get data but comes from other people. Secondary data were obtained at the product design and product manufacturing stages, namely experts including floor gymnastics experts and media experts. Secondary data is also sourced at the pilot stage through a questionnaire process.

The validity of the research data was carried out to test the data in order to obtain precise and fixed data. Precise data is the result of data acquisition in accordance with the use of instruments in the form of observations, interviews, and documentation as data acquisition tools. Fixed data is the result of data acquisition that does not have deviations far from what the instrument expects. Instrument expectations mean the results of using research instruments that have similarities between designs.

The results of obtaining precise and fixed data or in other terms are validity and reliability which are forms of data validity in product development. The process of data validity in product development is carried out based on the development procedures that have been designed. The development design starts from the problems encountered to implementation, and between these processes there is design validation.

Result and Discussion

Result

The implementation of research on the development of online learning media about floor gymnastics for elementary school (SD) level is by applying a research and development research model with the concept of Thiagarajan theory through 4 D, namely define, design, development, and dissemination. The define development structure contains the activity of determining the product to be developed along with the content to be filled. The definition activity is a needs analysis activity carried out through research and literature studies that is in accordance with the teaching materials of PJOK SD grade VI. Furthermore, the design or planning contains activities to make a design for the product that has been determined. Then development is the activity of implementing content that contains activities based on the design into products and testing the validity of the product repeatedly until the product is produced in accordance with the specifications set and declared feasible to be applied. Furthermore, dissemination contains activities to disseminate products that have been tested for the benefit of others.

The technique of acquiring or collecting data is carried out through the product development stages. The product development stage is carried out with the results of the FGD and the validation of experts related to the development of video-based media products. The stage of obtaining video feasibility data that can be applied as a research product during the COVID-19 pandemic is to validate content and structure. Validation was carried out by Mrs. Ika Endah Puspita Sari, S.Pd., M.Pd. as a Gymnastics Expert (Gymnastic Lecturer STOK Bina Guna), and Beny Aprial M, S.Pd., M.Pd. as an expert in Information and Technology (IT) STOK Bina Guna.
Discussion

Product development is carried out with the validity of the data, namely research obtained from the validation of floor gymnastics and IT experts. The expert validation obtained is also accompanied by data on rubric instruments related to feasibility and effectiveness tests with the target of sixth grade elementary school students. The data obtained from the two experts obtained that the feasibility and effectiveness of 95% can be applied and this data is used as the final stage of development research is a situation that is only carried out in the conditions of the covid-19 pandemic and if in normal situations it must be done with product testing and distribution of audio products. Visual Saragih, D., & Sari, D. M. (2020), Sembiring, J., Helmi, B., & Sihombing, H. (2022), Simbolon, A. B., & Hendrawan, D. (2022)

Follow-up research was carried out to obtain trial data of research products and have the right element, namely having conformity with the use of rubric instruments as a data acquisition tool. In addition to being accurate, fixed data are also obtained which are elements that do not have deviations far from what the instrument expects.

The implementation of product follow-up is carried out by implementing it through product testing through limited, primary, and operational level testing which can only be done in the face-to-face PJOK learning process. As stated above, after the follow-up is carried out, the product can be generalized to every sixth grade elementary school student to support the achievement of indicators of learning competence while studying from home.

Conclusion

The implementation of research on the development of online learning media on floor exercise techniques for elementary school (SD) level is by applying a research and development research model with the concept of Thiagarajan Theory through 4 D, namely define, design, development, and dissemination. The product is developed in MP4 format that can be played on video applications, namely VLC and Windows Media Player. The development of audio-visual-based media as learning media from home is very much needed, especially in the COVID-19 pandemic situation, where students can easily see references to badminton material techniques as contained in basic and core competencies.

References


