Development of Audio-Visual Media on the Physical Motor Development of Students in Big Kindergarten

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Abstract

This study aims to determine the effect of the development of audio-visual media on the motor-physical development of students in BIG Kindergarten. This study involved early childhood students aged 5-6 years as participants. An audio-visual-based online learning approach was used in this study to introduce students to interesting physical activities and support the development of their motor skills. This research method uses appropriate methods. The proposed solution is the use of audio-visual media which contains games as access to learning materials to develop children's gross motor skills. LCD/Projector is used to display learning videos. The results showed that the audio-visual media developed, including jumping over shapes, hot ball cold ball, cloth rolling ball, light ball, stepping on a tiger's tail, kangaroo ball game, and motion exercises and songs, had a positive influence on students' physical-motor development. Assessments from physical education experts, sports experts, and teachers show that this media gets a high score in the very good category. Based on the results of this study, it can be concluded that the development of audio-visual media in learning gross motor skills has a positive impact on the physical-motor development of early-age students. This media also received a positive response from students and educators, indicating a higher level of motivation and involvement in sports learning. This research contributes to the development of an innovative and effective learning approach in improving gross motor skills of early childhood students.

Keywords: Audio Visual Media, Physical Motor, Kindergarten

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INTRODUCTION

Physical-motor development is an important aspect of the growth and development of children at preschool age. Fine motor skills play a vital role in a child's ability to control body movements, participate in physical activities, and explore their surroundings. However, in some cases, students at BIG Kindergarten experience limitations in their physical-motor development (Webster et al., 2019).

Several factors can contribute to physical-motor development problems in children, such as a lack of adequate physical stimulation, lack of physical activity, and a tendency to spend time in activities that require children to sit or do not involve sufficient body movement (Gabbard, 2021). This can negatively impact a child's ability to develop motor coordination, muscle strength, and fine motor skills (Goodway et al., 2019).
In facing this challenge, Communication Technology (TK) is a technology used to transfer various information so that it is effective, on target, and valuable (Muslim et al., 2022). The development of audio-visual media can be an effective solution in stimulating the physical-motor development of students in BIG Kindergarten. Interesting and interactive audio-visual media can help increase children's interest and motivation to participate in physical activities (Haywood & Getchell, 2021). The use of this media can introduce variations of movement, show correct movement models, and provide fun learning experiences for children (Burton & Miller, 1998).

Science and technology are continuously developing, causing extraordinary changes and demanding teachers to have a variety of abilities and knowledge so that the learning process is carried out properly (Amaliyah, 2023). Audiovisual materials are often used in educational contexts as an effective tool for conveying information, motivating learners, and increasing their understanding (Magill & Anderson, 2010). In the context of the physical-motor development of students at BIG Kindergarten, audiovisual materials can be used to introduce correct movements, show models of movements, and provide examples of interesting physical activities for children.

Success in learning is strongly influenced by internal factors such as interest in learning and learning styles. Education develop with the existence of technology, (Tisnawati & Purbaningrum, 2022). The use of audiovisual materials can help enliven learning and create an interactive learning environment, motivate students to participate actively, and strengthen their understanding of movement and physical activity (Gallahue & Ozmun, 2006). In addition, audiovisual materials can also be used as an assessment and monitoring tool to observe students' progress in their physical-motor development (Robinson et al., 2015).

Today, with advances in technology, audiovisual materials are increasingly accessible and easy to use in educational contexts. However, it is important to select and use audiovisual materials that are appropriate to the context and learning objectives, and ensure that their use is well integrated in a comprehensive and balanced learning program. Developing proper motor skills is very important because it can significantly support the development of learners. As educators, our role in facilitating student needs and providing a variety of learning resources is critical to fostering growth in all areas of student development. One aspect that should not be neglected is the development of accurate and optimal physical and motor skills (Payne & Isaacs, 2017).

The educator's job involves creating a positive learning environment and providing children with engaging resources that can stimulate growth in all areas of early childhood development. The involvement of students in the learning process is closely related to the way educators foster an interesting learning environment and provide a variety of teaching materials that encourage the development of their physical and motor skills (Clark & Metcalfe, 2002).

BIG Kindergarten was chosen as the subject of this study because there are still many students who are less interested in study because they are considered boring, especially in the current situation where students have to complete assignments at home and educators tend to give monotonous assignments to avoid boredom. In addition, educators have never introduced online learning using...
audio-visual based learning resources. Therefore, by using audio-visual based learning resources, which are provided via the link by the instructor, the researcher will try to implement an online learning approach to increase student interest and engagement.

In this study, an audio-visual-based online learning approach will be used to introduce students to interesting physical activities and support the development of their motor skills (Ulrich & Sanford, 1985). It is expected that by using this media, students will be more motivated and involved in learning sports, which in turn will have a positive impact on their physical-motor development (Piek et al., 2008).

After conducting observations and interviews, researchers found several problems, including the lack of teaching staff, limited time, and conventional learning methods. Therefore, the solution proposed in this study is to use an audio-visual learning approach by utilizing audiovisual technology as access to learning materials to develop children's gross motor skills. This is done by using an LCD/Projector to display learning videos. Because the audio-visual learning method that focuses on games is a new learning approach at BIG Kindergarten, guidance or direction is needed in the implementation process.

Based on the problems described above, the researcher is interested in researching and discussing the title of the thesis entitled “Development of Audio Visual Materials for Physical Motor Students of Early Age 5-6 Years in BIG Kindergarten”. The aim of this research is: To determine the effect of the development of audio-visual materials on gross motor physical development of early age students 5-6 years, to find out the response of students and educators to the use of audiovisual media in gross motor physical development of early age students 5-6 years. By conducting this research, it is hoped that it will provide a better understanding of the effectiveness of using an audio-visual learning approach in developing gross motor skills of early-age student.

METHODS

In the research “Development of Audio Visual Game Materials on Physical Motor Development of Early Students 5-6 Years in BIG Kindergarten”, researchers need to use appropriate methods to collect relevant data and answer research questions. This research use qualitative method. This method involves an analysis of literature, journals, books, and other related sources that are relevant to the research topic. Literature study helps researchers to understand the theoretical basis and previous research related to the use of audio-visual materials in physical-motor development in early childhood. This will help the researcher to formulate a theoretical framework and gain an in-depth understanding of the research subject.

The observation method involves direct observation of students during the learning process using audio-visual materials. Observations can be made to obtain data regarding student participation, level of involvement, their responses to media use, and observed motor development. Observations can be made in the form of checklists, field notes, or by using relevant observation techniques.
The interview method can be used to obtain more in-depth data regarding the perceptions and opinions of students and educators regarding the use of audio-visual materials in physical-motor development. Interviews can be conducted by applying structured or semi-structured questions to students and educators to obtain information about experiences, perceptions, and the perceived impact of using the media.

The trial method can be carried out by giving assignments or activities to students that involve the use of audio-visual materials. The results of these trials can be used to measure their physical-motor development before and after using the media, as well as to evaluate the effectiveness of using audio-visual materials in developing gross motor skills.

Data collected from the various methods above will be analyzed to answer research questions. Data analysis can be performed using statistical techniques, qualitative analysis, or a combination of both, depending on the type of data collected. The results of the analysis will provide deeper insight into the effect of using audio-visual materials on the physical-motor development of early-age students.

RESULTS & DISCUSSION

Results

In this study, there are 7 audio-visual media developed for learning gross motor skills, namely:

1. Jumping over Shapes: Through this media, students are taught to jump over various geometric shapes that are displayed in audio-visual form. The purpose of this activity is to practice jumping skills and develop coordination of body movements.

2. Hot Ball Cold Ball: This media teaches students to move the ball from one place to another using hot ball and cold ball techniques. This activity helps develop ball holding, throwing, and catching skills.

3. Cloth Roll Ball: In this medium, students are taught to roll a ball made of cloth. This activity helps practice skills of rolling, aiming, and controlling the ball.

4. Light Ball: This medium involves using a light ball to practice better holding, throwing, catching and aiming skills.

5. Stepping on a Tiger’s Tail: Through this media, students are taught to step on a “tiger’s tail” which is displayed in audio-visual form. The purpose of this activity is to practice stomping skills and controlling foot movements.

6. Kangaroo Ball Game: This medium involves a game that combines jumping and ball movements. Students will be invited to jump and direct the ball like a kangaroo. The aim of this activity is to practice your jumping and ball control skills.

7. Motion Gymnastics and Songs: This media focuses on a combination of gymnastic movements and songs. Students will be invited to follow the body movements displayed in the audio visual while singing a song. The purpose of this activity is to train coordination of body movements and rhythm.
By using these various audio-visual media, it is hoped that students will be more motivated and involved in learning gross motor skills. Each media is developed with a specific purpose to train motor skills and provide variety in learning.

In the results of observing audio-visual media used in learning gross motor skills, physical education experts, adapted sports experts, and teachers provide an assessment that the “Jump over Shapes” media obtains a value range between 204-242 on a scale of 205, which is included in the very good category. According to them. In addition, based on the media effectiveness assessment format sheet, this media obtains a score range between 130-152 on a scale of 130, which is also included in the very good category.

For the media “Hot Ball Cold Ball”, the results of game observations show that this media obtains a value range between 204-242 on a scale of 206, which is included in the very good category according to physical education learning experts, adapted sports experts, and teachers. Furthermore, based on the media effectiveness assessment format sheet, this media obtains a value range between 130-152 on a scale of 133, which is also included in the very good category.

As for the “Rolling Ball” media, the results of game observations show that this media obtains a value range between 204-242 on a scale of 205, which is included in the very good category according to physical education learning experts, adapted sports experts, and teachers. Based on the media effectiveness assessment format sheet, this media obtains a score range between 130-152 on a scale of 134, which is also included in the very good category.

The results of this assessment indicate that the audio-visual media used in learning gross motor skills, such as “Jump over Shapes”, “Hot Ball Cold Ball”, and “Roll Roll Ball”, are rated very well by experts and teachers in terms of their effectiveness and quality in helping the development of gross motor skills of students.

For the “Light Ball” media, the results of game observations show that this media obtains a value range between 204-242 on a scale of 205, which is included in the very good category according to physical education learning experts, adapted sports experts, and teachers. Based on the media effectiveness assessment format sheet, this media obtains a score range between 130-152 on a scale of 133, which is also included in the very good category.

As for the media “Stepping on the Tail of the Tiger”, the results of game observations show that this media obtains a value range between 204-242 on a scale of 205, which is included in the very good category according to physical education learning experts, adapted sports experts, and teachers. Based on the media effectiveness assessment format sheet, this media obtains a score range between 130-152 on a scale of 133, which is also included in the very good category.

The media “Kangaroo Ball” also received a good assessment of the results of game observations, with a range of values between 204-242 on a scale of 205, which is included in the very good category according to physical education learning experts, adapted sports experts, and teachers. Based on the media effectiveness assessment format sheet, this media obtains a score range between 130-152 on a scale of 133, which is also included in the very good category.
Finally, the “Gymnastics and Song” media also obtained a good assessment from the results of observations of the game, with a score range between 204-242 on a scale of 205, which is included in the very good category according to physical education learning experts, adapted sports experts, and teachers. Based on the media effectiveness assessment format sheet, this media obtains a score range between 130-152 on a scale of 133, which is also included in the very good category.

The results of this assessment indicate that all audio-visual media developed in learning gross motor skills, including “Light Ball”, “Stepping on the Tiger’s Tail”, “Kangaroo Ball”, and “Moving and Song Gymnastics”, are rated very well by experts and teachers, in terms of its effectiveness and quality in helping the development of students’ gross motor skills.

Discussion
To find out the impact of audio-visual development on gross motor skills of early-age students aged 5-6 years

Based on data from game observations, assessments from physical education learning experts, adapted sports experts, and teachers, gross motor skills learning media with “Jump Shapes” shows a range of values between 204-242 on a scale of 237, which is included in the very good category. Then, based on the media effectiveness assessment format sheet, this media obtains a value range between 130-152 on a scale of 130, which is also included in the very good category.

For the media “Hot Ball Cold Ball”, the results of game observations show that this media obtains a value range between 204-242 on a scale of 240, which is included in the very good category according to the assessment of physical education learning experts, adapted sports experts, and teachers. Based on the media effectiveness assessment format sheet, this media obtains a score range between 130-152 on a scale of 133, which is also included in the very good category.

The “Rolling Ball” media also received a good assessment of the results of observations of the game, with a range of values between 204-242 on a scale of 238, which is included in the very good category according to the assessment of physical education learning experts, adapted sports experts, and teachers. Based on the media effectiveness assessment format sheet, this media obtains a score range between 130-152 on a scale of 134, which is also included in the very good category.

Finally, the “Light Ball” media also gets a good assessment of the results of game observations, with a range of values between 204-242 on a scale of 234, which is included in the very good category according to the assessment of physical education learning experts, adapted sports experts, and teachers. Based on the media effectiveness assessment format sheet, this media obtains a score range between 130-152, which is also included in the very good category.

Thus, the results of the assessment show that all the audio-visual media developed in learning gross motor skills, including “Jump Shapes”, “Hot Balls, Cold Balls”, “Rolling Cloth Balls”, and “Light Balls”, are rated very well by the
experts, and teachers in terms of effectiveness and quality in helping the development of gross motor skills of students.

CONCLUSION

Based on the results of assessments from physical education learning experts, adapted sports experts, and teachers, as well as the results of game observations and assessments of media effectiveness, it concluded that: (1) Audio-visual media developed in learning gross motor skills, including “Jump Shapes”, “Hot Ball Cold Ball”, “Rolling Cloth Ball” and “Light Ball” are considered very good in helping the development of students' gross motor skills. (2) All of these audio-visual media received a high range of scores in the assessment of experts and teachers, indicating that these media are effective and of high quality in supporting gross motor skills learning. (3) This audio-visual media can increase students' motivation and involvement in sports learning, which in turn has a positive impact on their physical-motor development.

Thus, the development of audio-visual media in learning gross motor skills at BIG Kindergarten has proven successful and useful. This media provides an interesting learning alternative, helps students become more active, and contributes to developing their gross motor skills.

REFERENCES


