# Utilization of Smart TV Media Against Student Learning Interests in Natural and Social Science Subjects

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**Abstract**: Education plays a crucial role in producing high-quality human resources. Quality education contributes to the progress of a nation by providing competent individuals. The aim of this study is to analyze the utilization of Smart TV media in NSS (Natural Sciences and Social Studies) learning. A qualitative approach was employed, and data were collected through observation, interviews, and documentation. Data validity was ensured through source triangulation and data triangulation. The primary and secondary subjects of the study were students and teachers. The findings indicate that the use of Smart TV media in the learning process enhances student enthusiasm and active participation, resulting in an increased interest in NSS subjects.

Keywords: Media, Smart TV, Interest in Learning, NSS Subjects

#### 1. Introduction

Education plays a crucial role in preparing excellent human resources and contributing to the progress of a nation. However, in the current media era, teaching approaches need to be adapted to the changing times. Learning activities no longer solely rely on conventional lecture methods but also utilize various media as a means of delivering messages and facilitating student interaction. Despite this, there is still a crucial gap between these expectations and the actual practice in the field, where the use of media in teaching and learning is still suboptimal. Therefore, efforts are needed to enhance teachers' understanding and skills in utilizing media effectively to make learning more effective, engaging, and relevant to students' needs.

Education has specific goals outlined in the Republic of Indonesia Law No. 20 of 2003. The goals of education are to optimize the abilities of students to become individuals who have faith, fear of God, noble character, knowledge, health, competence, creativity, independence, and responsible citizens [1]. Teachers play a crucial role in achieving these goals by guiding students to become contributors to the nation and the state. In the process of teaching and learning, there are five interconnected elements: content, objectives, methods, media, and assessment [2]. The selection of teaching methods should be tailored to the media used to deliver the content according to students' needs and interests. Therefore, it is crucial to pay attention to and develop students' interests, which can vary from high to low [3].

Teachers need to understand students' readiness and learning interests and find solutions to address their lack of interest in learning materials to achieve success in the teaching and learning process. One crucially effective way is to utilize instructional media that can stimulate students' learning interest [4]. Teachers need to have creativity and innovation in using media to make learning engaging, both in individual learning and in the

classroom [5]. In the context of NSS (Natural Sciences and Social Studies) learning, the use of Smart TV as one of the media is crucial to enhance students' creativity and enthusiasm in participating in the learning process. By selecting media that aligns with the learning materials, students can acquire a deeper learning experience in building social knowledge. This also takes into account students' preference for oral storytelling over written, making the selection of relevant audio-visual media crucial. However, the use of audio-visual media, including Smart TV, in learning is still suboptimal in classrooms.

Overall, instructional media encompasses everything that can be used to deliver learning materials with the aim of stimulating students' attention, interest, thoughts, and feelings to achieve learning objectives [6]. Media plays a crucial role in comprehensive discussions on the education system. Media is a supporting tool that can be used as a crucial means of support in teaching [7]. Media is an integral part of the teaching and learning process to achieve educational goals in general and specific learning objectives in schools, in the form of educational messages or information contained in hardware equipment as a means to display the content of the media [8].

Smart TV media is part of rapidly developing technology, often referred to as smart television. With its ability to display images, play videos, music, and connect to the internet, Smart TV provides a crucially interactive experience to users. Features such as smart content innovation, which presents advanced content such as video tutorials and edutainment for children, as well as the ability to connect with other devices such as smartphones, computers, and laptops, make Smart TV crucially different from conventional televisions [9]. In the context of learning, Smart TV provides crucial opportunities for students to learn concretely and access various learning content such as videos, music, and digital media with the best teaching content [10].

One of the current weaknesses of teachers in managing learning is the underutilization of available teaching resources. Compared to other professions, teachers are relatively slow in utilizing teaching resources, especially various technological innovations as effective, efficient, and enjoyable instructional media [11]. In delivering learning materials, many teachers fail to consider students' interests, leading to a loss of students' learning interest. The media presented so far has been predominantly textual, such as books, texts, and student worksheets [12]. The use of instructional media must be aligned with the subject matter to ensure efficient and effective learning activities. The selection of media should consider factors such as the purpose of use, target audience, media characteristics, time, cost, and availability [13].

The research conducted by Ammar Firdausi Yuda Pratama on analyzing students' learning interest using Smart TV media at Permata Umat IT Elementary School revealed that the initial observations of teaching at Permata Umat IT Elementary School adopted a curriculum-based on the 2013 curriculum with the thematic subject, distinguishing it from other schools due to the presence of Smart TV instructional media. The use of information and communication technology-based instructional media is still rare in Indonesian schools. Teachers commonly use LCD projectors as instructional media. The research, which consisted of observations and interviews, indicated an increase in students' learning interest in lessons using Smart TV media, showing that the use of instructional media can influence students' learning interest. When the learning process began using Smart TV media, students showed high enthusiasm in listening and participating in the lessons. They appeared calm,

refrained from talking to friends, could answer all of the teacher's questions, and were not hesitant to ask if they didn't understand [14].

Based on the initial observations conducted in Grade IV of Teluk State Elementary School 4, it was found that during the NSS learning process without utilizing Smart TV media, many students engaged in playful activities and chatted with friends when the teacher delivered the lesson using only lecture, discussion, and question-and-answer methods. Consistent with the results of interviews with Grade IV teachers, it was found that students' learning interest in the NSS subject was low when Smart TV media was not utilized. Students tended to be passive in learning, merely listening to the teacher's explanations, resulting in suboptimal learning achievement. The teaching methods employed by the teacher still relied heavily on lecture, discussion, and question-and-answer methods, with the teacher functioning only as a motivator for students when they encountered difficulties.

Teluk State Elementary School 4 has implemented the Merdeka Curriculum, which includes NSS learning. NSS integrates the subjects of Natural Sciences and Social Studies in the Merdeka Curriculum, taught starting from Grade III and IV with the aim of developing competence in natural and social sciences. In this context, teachers are expected to be creative and innovative in utilizing instructional media. The Merdeka Curriculum allows teachers the freedom to select suitable tools and instructional media according to students' needs and learning interests. Additionally, this type of learning also emphasizes character formation based on Pancasila principles. This school, particularly in the NSS subject, has already started using Smart TV media as seen in the lesson implementation plan.

Based on these circumstances, the researcher is driven to conduct a study related to the utilization of Smart TV media in enhancing students' learning interest in NSS. This study aims to explore the extent to which the use of Smart TV as an instructional media can influence students' learning interest in the NSS subject. Thus, this research is expected to provide a deeper understanding of the effectiveness and impact of utilizing Smart TV media in improving the quality of NSS learning, as well as to provide relevant recommendations for teachers and educational practitioners in optimizing the use of media.

### 2. Research Method

This research was conducted in the fourth-grade class of SD Negeri 4 Teluk, South Purwokerto District, Banyumas Regency. The researcher employed a qualitative approach. The aim was to obtain in-depth data from the individuals observed, both through oral and written means. The qualitative research design is naturalistic, where the researcher investigates a real-life phenomenon without manipulating the research setting. The focus of the study can be on programs, groups, individuals, relationship patterns, and all aspects seen in their natural state [15].

Data collection techniques are methods used to obtain information in the field, ensuring that the research results are useful and can contribute to new theories and discoveries. Without proper data collection techniques, the research objectives would be futile. The data collection techniques employed in this study include observation, interviews, and documentation. Once the data is collected, it will be analyzed by the researcher. By employing these techniques, the research will yield accurate and testable data [16]. The use of these data collection techniques requires the researcher's presence at the location to observe the actual conditions during the NSS lessons.

The analysis used in this research is interactive data analysis. This analysis includes data collection, data reduction, data presentation, and drawing conclusions/verification [17]. The researcher utilized source triangulation and technique triangulation. Technique triangulation involves testing data credibility by cross-checking data from the same source using different techniques. Source triangulation is a technique used to test data credibility by verifying the accuracy of the data obtained through multiple sources [18].

## 3. Results and Discussion

The results of observations and interviews conducted with the fourth-grade teacher and students, totaling 38 students, at SD Negeri 4 Teluk showed that the utilization of Smart TV as a teaching tool for NSS had a significantly positive impact. Both teachers and students agreed that the use of Smart TV as a learning tool was excellent, effective, efficient, and enjoyable. Students felt motivated and enthusiastic about learning, resulting in increased active participation in the lessons. The presentation of learning content using Smart TV provided a real experience for students regarding relevant NSS content. Through the video presentations displayed on Smart TV, students found it easier to understand and internalize the taught concepts. This is expected to improve students' understanding and academic achievement in NSS.

Additionally, the researcher also conducted interviews with fifth and sixth-grade teachers at SD Negeri 4 Teluk to assess the effectiveness of Smart TV utilization in their classes. The results of the interviews with the fifth and sixth-grade teachers aligned with the perceptions of the fourth-grade teachers and students. The teachers expressed that the use of Smart TV in teaching also had significant benefits in their classes. They found that Smart TV facilitated more engaging and interactive content delivery, leading to increased student engagement in the learning process.

The observations revealed that the utilization of Smart TV in NSS lessons at SD Negeri 4 Teluk relieved teachers from the burdens of creating conventional teaching aids, which were time-consuming, mentally taxing, and costly. As a replacement for conventional media, the fourth-grade teachers utilized Smart TV to display videos from YouTube and presentation slides created using Canva. When searching for relevant YouTube content, the teachers were facilitated by the integrated Google Assistant feature on the Smart TV. They could easily search for desired content using voice commands through the TV remote. Consequently, the Smart TV would automatically display the requested educational content. In the presentation of the lesson material, the teachers connected their laptops to the Smart TV to display presentation slides containing relevant images, illustrations, and texts related to Indonesian Cultural Heritage. This approach provided a more interactive and visual learning experience, enriching students' understanding of the NSS subject matter. The use of these additional media elements allowed the teachers to deliver the material in an engaging manner, helping students grasp the learning concepts more effectively.

Based on the observation, interviews, and documentation, it is evident that effective planning is crucial for teachers to deliver engaging and interesting materials. The planning process plays an important role in providing direction and understanding to students. Through this process, teachers can help students realize the objectives embedded in their learning tasks. As a professional teacher, thorough preparation before teaching duties, including the selection of appropriate media, is essential. Teachers need to prepare media that can meet the needs of students. By engaging in careful planning, teachers can ensure that the use of appropriate instructional media will help achieve desired learning goals.

From the interviews, observations, and documentation of students, it is apparent that the use of Smart TV in IPAS learning has resulted in an increased interest in learning. Students display higher enthusiasm and active participation in the learning activities. They feel engaged and interested in the materials presented through Smart TV, leading to an enhancement in their intrinsic motivation to learn. Additionally, the results of achievement tests show a significant improvement after the utilization of Smart TV. This indicates that the use of this media is effective in enhancing students' learning outcomes in the IPAS subject.

### 4. Conclusion

Based on the interviews, observations, and documentation gathered during this research, it can be understood that the utilization of Smart TV as an instructional media, particularly in the IPAS subject at SD Negeri 4 Teluk, has become a dependency for students. This is evident from the high enthusiasm displayed by students when the materials are presented using Smart TV. Conversely, students tend to be less interested when the material is delivered solely through lecture-based methods. Therefore, the teachers of Grade IV and other teachers at SD Negeri 4 Teluk strive to meet the students' dependency by incorporating Smart TV into every lesson.

The implementation of Smart TV as an instructional media in IPAS learning for Grade IV at SD Negeri 4 Teluk has led to students becoming obsessed with it. When IPAS learning does not involve Smart TV, students show low interest, tend to be unfocused, engage in conversations with peers, and frequently ask for permission to leave the classroom. Conversely, when IPAS learning incorporates Smart TV, students are highly enthusiastic and actively participate in the lessons. Additionally, the utilization of Smart TV in IPAS learning has several positive impacts, including:

- a. Teachers are no longer burdened with creating conventional teaching aids for IPAS.
- b. The use of Smart TV enhances teachers' ability to plan and select appropriate media. Teachers can prepare media that align with students' needs.
- c. The implementation of IPAS learning using Smart TV makes the lessons easier to understand, optimizes time utilization, and provides varied and accessible learning materials.
- d. Interviews and observations demonstrate an increase in students' interest in learning when Smart TV is used in IPAS instruction. Students become highly motivated to learn due to the engaging, effective, active, and varied instructional materials and media, fostering an intrinsic desire to learn.
- e. The results of students' achievement tests in IPAS learning show improvement.

However, other factors such as the appropriate utilization of media aligned with the learning needs, teachers' skills in integrating Smart TV into instruction, and students' social and psychological conditions can also influence their interest in IPAS learning. Therefore, further research is necessary to measure the effectiveness of using Smart TV as an instructional media in enhancing students' interest in the IPAS subject.

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