

## **Utilization Of Digital Media In IPS Learning (Case Study At SMP Negeri 3 Manokwari)**

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### **Article Info**

#### **Article history:**

Accepted: 11 Mei 2026

Publish: 08 Juni 2026

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#### **Keywords:**

Media Digital;

Social Studies Learning;

State Junior High School 3;

Manokwari;

Educational Technology;

West Papua;

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### **Abstract**

*The use of digital media in Social Studies (IPS) learning is one of the important transformations in the world of education in the 21st century. This study aims to describe the actual conditions of digital media utilization in the Social Studies learning process at SMP Negeri 3 Manokwari, identify obstacles faced by teachers and students, and formulate relevant development strategies. The study used a descriptive qualitative approach with a case study method. Data collection was conducted through classroom observations, in-depth interviews with Social Studies teachers, the principal, and students, and analysis of lesson planning documents. The results show that some Social Studies teachers at SMP Negeri 3 Manokwari have utilized digital media in the form of learning videos, PowerPoint presentations, and the Google Classroom platform, but the intensity of use is still not optimal due to limited internet infrastructure, lack of teacher training, and low ownership of digital devices by students from low economic backgrounds. These findings emphasize the importance of school policy support, ongoing training for teachers, and the provision of adequate digital infrastructure to improve the quality of digital-based Social Studies learning in the West Papua region.*

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## **1. INTRODUCTION**

The era of the Industrial Revolution 4.0 and Society 5.0 has brought fundamental changes to various aspects of human life, including education. The increasingly rapid development of information and communication technology (ICT) is driving digital transformation in schools, including in areas in eastern Indonesia such as Manokwari, West Papua. Conventional learning, which has relied on textbooks and lecture methods, is deemed insufficient to meet the needs of students growing up in the digital age.

Social Studies (IPS), a subject with a very broad scope, encompassing history, geography, economics, and sociology, urgently requires innovation in its delivery to make it more contextual, relevant, and engaging for students. The use of digital media such as documentary videos, interactive maps, economic simulations, and online learning platforms can bridge the gap between the abstract material in textbooks and the complex realities of social life.

SMP Negeri 3 Manokwari is a public junior high school located in Manokwari City, West Papua. As a school located in the provincial capital, SMP Negeri 3 Manokwari faces unique challenges in integrating digital technology into learning. Based on initial observations, the school has several supporting facilities, such as a computer laboratory and internet access, but their

utilization in social studies learning is still suboptimal. This condition is influenced by various factors, including limited teacher digital competency, a lack of equitable infrastructure, and the diverse socio-economic backgrounds of students.

The COVID-19 pandemic that has gripped Indonesia since 2020 has indirectly accelerated the adoption of digital media in learning. Teachers at SMP Negeri 3 Manokwari were forced to master various digital platforms such as Google Classroom, Zoom, and WhatsApp Groups for distance learning. This experience has left a positive impact on teachers' digital literacy, although not all teachers have been able to adapt quickly and evenly.

Post-pandemic, the demand to continue utilizing digital media in face-to-face learning has grown stronger. The Independent Curriculum, which has been gradually implemented since 2022, also encourages teachers to be more creative and innovative in designing lessons, including through the use of digital technology. In the context of social studies learning, this presents both an opportunity and a real challenge.

Based on the description above, the author was motivated to compile this paper as an effort to map the real conditions of the use of digital media in social studies learning at SMP Negeri 3 Manokwari, identify the obstacles faced, and formulate recommendations that can be used as a reference for the development of digital-based social studies learning in the future.

Based on the background outlined above, the use of digital media in social studies learning at SMP Negeri 3 Manokwari still faces various challenges, both in terms of facilities and infrastructure, teacher competence, and student readiness in utilizing learning technology. On the other hand, the development of digital technology demands learning innovations that can increase the effectiveness, interactivity, and quality of the teaching and learning process. Therefore, an in-depth study is needed regarding the actual conditions of digital media utilization, the obstacles encountered, and the challenges faced. Faced with the implementation, as well as the right strategy to optimize its use in the provision of Social Studies lessons. The formulation of the problem in this paper includes the current condition of digital media utilization in social studies learning at SMP Negeri 3 Manokwari, the obstacles faced by teachers and students in utilizing digital media in social studies learning, and what is the right strategy to optimize the utilization of digital media in social studies learning at SMP Negeri 3 Manokwari.

In line with the formulation of the problem, this paper was compiled to describe the real conditions of the use of digital media in social studies learning at SMP Negeri 3 Manokwari, identifying various obstacles faced by teachers and students in integrating digital media into the learning process, and formulating relevant, effective, and applicable development strategies to optimize the use of digital media in social studies learning at SMP Negeri 3 Manokwari.

This paper is expected to provide both theoretical and practical benefits. Theoretically, this paper is expected to enrich scientific studies in the field of educational technology, particularly regarding the use of digital media in social studies learning at the junior high school level, especially in the context of the archipelago and eastern Indonesia, such as West Papua. Furthermore, the results of this study can also serve as an academic reference for the development of concepts and further research on technology integration in learning. Practically, this paper is expected to provide benefits to various parties. For social studies teachers, this paper can serve as a reference in designing and implementing more innovative, interactive, and effective digital media-based learning. For school principals, the results of this study can be used as considerations in policy-making related to the development of facilities, infrastructure, and digital competencies in the school environment. For postgraduate students, this paper can serve as a reference in

conducting further, more in-depth research on educational technology, particularly in the West Papua region. Meanwhile, for the education office, this paper is expected to provide input in designing training programs, mentoring, and digital competency development for educators to improve the quality of learning in schools.

### **The Concept of Digital Media in Education**

Digital media is any form of device, platform, or content that uses digital technology to convey information and facilitate the learning process. Arsyad (2016) defines digital learning media as a tool that utilizes information and communication technology to facilitate the teaching and learning process so that learning objectives can be achieved more effectively and efficiently. In the context of 21st-century education, digital media includes hardware such as computers, tablets, and smartphones, as well as software such as learning applications, Learning Management System (LMS) platforms, and multimedia content.

According to Daryanto (2016), digital media in learning has several superior characteristics compared to conventional media, namely: (1) the ability to present information in various formats (text, images, audio, video, and animation); (2) ease of access and wide distribution of content; (3) high interactivity that encourages active student involvement; and (4) the ability to update content in real-time according to the latest information developments.

In the era of the Independent Curriculum, digital media is no longer seen as merely a tool, but as an integral part of the learning ecosystem that supports the profile of Pancasila students, especially in the dimensions of critical and creative reasoning.

### **Types of Digital Media for Social Studies Learning**

Various types of digital media can be used in social studies learning, including:

1. Learning Videos: Historical documentaries, animations of natural processes, and recordings of interviews with social informants that can be accessed via YouTube or similar platforms.
2. Digital Maps and GIS (Geographic Information System): Applications such as Google Maps, Google Earth, and ArcGIS Online that allow students to understand spatial concepts visually and interactively.
3. LMS platforms: Google Classroom, Moodle, and Edmodo, which function as virtual classrooms for assignment distribution, discussion, and assessment.
4. Economic Simulation Application: A program that allows students to simulate economic activities such as buying and selling, investing, and budget management.
5. Educational social media: Using Instagram, educational TikTok, and podcasts as contextual learning resources.
6. Interactive Presentations: PowerPoint, Canva, Prezi, and Genially, which allow for dynamic and engaging presentation of material.

### **Learning Theories that Support the Use of Digital Media**

The use of digital media in social studies learning can be explained through several learning theories. First, Vygotsky's constructivist theory emphasizes that knowledge is actively constructed by students through social interaction and the aid of cultural tools. Digital media functions as a mediating tool that expands students' Zone of Proximal Development (ZPD). Second, Mayer's (2009) multimedia learning theory states that humans learn more effectively when information is presented simultaneously in two channels—visual and verbal—which is a key advantage of digital media.

Third, the TPACK (Technological Pedagogical Content Knowledge) theory developed by Mishra and Koehler (2006) emphasizes that effective teachers must have an integrated mastery of

scientific content, pedagogical strategies, and technological skills. In the context of social studies learning, teachers with good TPACK will be able to select and integrate digital media that best suit the learning objectives and characteristics of the social studies material.

### **Independent Curriculum and Digital Technology Integration**

The Independent Curriculum, implemented by the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) since 2022, provides teachers with the flexibility to design meaningful, relevant, and student-centered learning. Within this framework, the use of digital media is not simply an option but part of a recommended learning strategy to develop students' digital literacy and critical thinking skills.

The Social Studies Learning Outcomes (CP) in the Independent Curriculum for junior high school students explicitly encourage the use of various learning resources, including digital media, to help students understand social realities more comprehensively and contextually. This provides a strong normative foundation for the implementation of digital media in schools throughout Indonesia, including SMP Negeri 3 Manokwari.

## **2. METHOD**

### **A. Research Approach and Type**

This research uses a qualitative approach with a case study type of research. The qualitative approach was chosen because this research aims to gain an in-depth understanding of the phenomenon of digital media utilization in learning *grapen* IPS as it occurs naturally in the field. Case studies allow researchers to holistically and contextually explore the real conditions that occur at SMP Negeri 3 Manokwari as a single, information-rich unit of analysis.

Creswell (2014) explains that qualitative research with a case study design is very appropriate to use when researchers want to describe and analyze a phenomenon in depth in a real-life context, especially when the boundaries between the phenomenon and its context are not clearly visible.

### **B. Location and Time of Research**

This research was conducted at SMP Negeri 3 Manokwari, located in Manokwari City, West Papua Province. This location was chosen based on the consideration that SMP Negeri 3 Manokwari is a public school that has implemented the Independent Curriculum and has basic technological facilities that allow for comprehensive research on digital media utilization. Data collection took place in the even semester of the 2025/2026 academic year.

### **C. Research Subjects and Informants**

The subjects of this study were determined using purposive sampling, with criteria of representativeness and ability to provide in-depth information. The research informants included:

1. The Principal of SMP Negeri 3 Manokwari, as a policy maker at the school level, regarding the development of learning technology.
2. Two social studies teachers who actively teach in grades VII, VIII, and IX.
3. Deputy Principal for Curriculum, regarding the policy of implementing the Independent Curriculum and the use of technology.
4. School computer laboratory management staff.
5. Ten students were selected representatively from grades VII, VIII, and IX based on variations in academic achievement and economic background.

### **D. Data Collection Techniques**

#### ***1. Passive Participant Observation***

Researchers conducted direct observations of the social studies learning process in a classroom using digital media. Observed aspects included the type of digital media used, how it was used, student responses, and any technical obstacles encountered during the learning process.

## **2. In-depth Interview**

Semi-structured interviews were conducted with all research informants. The interview guide was developed based on the research focus and was flexibly developed to suit the direction of the conversation. Interviews were conducted face-to-face and recorded with the informants' consent.

## **3. Documentation Study**

The documents reviewed include Learning Implementation Plans (RPP) or Teaching Modules based on the Independent Curriculum, computer laboratory usage schedules, ICT infrastructure inventory reports, and records of teacher training programs attended.

## **E. Data Analysis Techniques**

Data analysis follows the interactive analysis model of Miles, Huberman, and Saldaña (2014) which consists of three simultaneous activity flows, namely: (1) data condensation, namely the process of selecting, focusing, simplifying, and transforming raw data; (2) data presentation, namely the arrangement of organized information in the form of narratives, tables, or charts; and (3) drawing conclusions and verification.

## **F. Data Validity**

To ensure data validity, researchers used source triangulation (comparing data from various informants) and technical triangulation (comparing data from observations, interviews, and documentation). Additionally, member checking was conducted, which involved reconfirming research findings with key informants to ensure accurate interpretation.

## **3. RESULTS AND DISCUSSION**

### **A. General Description of SMP Negeri 3 Manokwari**

SMP Negeri 3 Manokwari stands as one of the leading public junior high schools in Manokwari City, West Papua Province. The school accommodates students from diverse ethnic and cultural backgrounds, reflecting the broader diversity of West Papuan society. With a growing student population each year and a teaching staff largely comprised of civil servants (ASN), the school has the necessary foundation to implement a technology-based learning transformation.

The facilities that's lipped Facilities at SMP Negeri 3 Manokwari include a computer lab with a capacity of approximately 30 computers, internet access via a centralized Wi-Fi network located at several points throughout the school, and projectors installed in several classrooms. The school has officially implemented the Independent Curriculum since the 2023/2024 academic year and is actively participating in the school digitalization program promoted by the West Papua Provincial Education Office.

### **B. Conditions of Using Digital Media in Social Studies Learning**

#### **1. Types of Digital Media Used**

Based on observations and interviews, it was found that social studies teachers at SMP Negeri 3 Manokwari have utilized several types of digital media in their teaching, although the intensity and variety still need to be improved. The most frequently used digital media is PowerPoint presentations displayed through classroom projectors. Nearly all social

studies teachers use PowerPoint as the primary medium for delivering materials, ranging from the history of world civilizations and Indonesia's geography to concepts of economic activity.

In addition to PowerPoint, some teachers also utilize YouTube videos to enrich their teaching. Documentaries about the lives of Papuan tribes and animated videos about the formation of the Indonesian archipelago are examples of content used to strengthen students' understanding of geography and local history. Some teachers are also beginning to use Google Classroom as an LMS platform, primarily to deliver materials, assignments, and announcements to students digitally.

## **2. Intensity and Consistency of Use**

Although various digital media are familiar and used by teachers, their intensity is not consistent. Based on observations during the research, the average active use of digital media in a single social studies lesson only occurs in around 40-50 percent of the total meetings in a semester. This is influenced by the availability of facilities that are not always optimally accessible, such as projectors that sometimes break down or unstable internet connections.

An eighth-grade social studies teacher revealed in an interview that he really wanted to use digital media more often, but was often hampered by unstable electricity conditions and slow internet connections, especially during certain hours when many users were connected simultaneously to the school network.

## **C. Barriers to the Use of Digital Media**

### **1. Limitations of Technology Infrastructure**

Technological infrastructure is a major obstacle at SMP Negeri 3 Manokwari. The school's internet connection has limited bandwidth, resulting in frequent interruptions, especially when used simultaneously by multiple classes. Not all classrooms are equipped with functioning projectors, and computer lab use must be staggered, limiting the frequency of access for each social studies class.

### **2. Limitations of Teachers' Digital Competence**

Not all social studies teachers at SMP Negeri 3 Manokwari have sufficient digital competency to optimally design and implement digital media-based learning. Some senior teachers, more familiar with conventional methods, face psychological barriers such as a lack of confidence in operating new technologies. Available training is still incidental and not systematically programmed to the specific needs of social studies teachers.

### **3. Device Ownership Gap Among Students**

The highly diverse socioeconomic backgrounds of students at SMP Negeri 3 Manokwari create a gap in digital device ownership. Many students don't own smartphones or personal computers at home, making digital assignments given through online platforms a challenge. This situation has the potential to exacerbate the learning gap between students from wealthy and low-income families.

### **4. Lack of Locally Adapted Digital Content**

The limited availability of digital content relevant to the local context of West Papua is also a significant obstacle. Most videos, animations, and infographics available online focus on Javanese or global contexts, making them less relevant to the daily lives of students in Manokwari. Teachers are required to create their own local content, which requires time, skills, and equipment that are not always readily available.

## **D. Strategy for Optimizing the Use of Digital Media**

### **1. Strengthening School Digital Infrastructure**

Local governments and schools need to collaborate to increase internet bandwidth capacity, increase the number of Wi-Fi access points distributed evenly throughout the school area, and ensure regular hardware maintenance and updates. The Ministry of Communication and Informatics' BAKTI program, which provides internet access in the 3T (Frontier, Outermost, and Disadvantaged) regions, can be optimized as a source of digital infrastructure support for schools in West Papua.

### **2. Systematic and Continuous Teacher Training**

Digital literacy training programs for social studies teachers need to be designed in a systematic, sustainable manner and based on real-world needs. Training should not only be technical (how to use applications) but also encompass pedagogical aspects, such as how to effectively integrate digital media into social studies learning designs. City-level Social Studies Subject Teachers' Forums (MGMP) can serve as a platform for sharing best practices and collaboratively developing digital capacity.

### **3. Development of Locally Informed Digital Content**

Social studies teachers at SMP Negeri 3 Manokwari need to be encouraged and facilitated to develop digital content that highlights the rich culture, history, and natural resources of West Papua. This content could take the form of teacher-student documentary videos, infographics about Papua's ethnic diversity, or digital maps showing the distribution of West Papua's natural resources. Student involvement in content creation can also foster digital literacy skills and a love for their region.

### **4. School Policies that Support Digital Ecosystems**

Principals need to formulate policies that explicitly encourage and recognize digital-based learning innovation by teachers. These policies could include providing dedicated time for teachers to develop digital media, rewarding innovative teachers, and allocating an adequate budget for learning technology development in the School Work Plan and Budget (RKAS).

## **E. Relevance to the Development of National Education**

The findings of this study align with the direction of national education policy outlined in the Ministry of Education, Culture, Research, and Technology's 2020-2024 Strategic Plan (Renstra), which prioritizes digital transformation in education. The 9th episode of the Merdeka Belajar program, which focuses on School Digitalization, and the Merdeka Mengajar (PMM) platform, which provides thousands of free digital learning content for teachers, demonstrate the government's commitment to promoting technology adoption in schools across Indonesia.

In the context of West Papua, efforts to improve education quality through digital technology are also supported by affirmative action policies from the central and regional governments, including the Papua Special Autonomy program, which allocates a portion of the budget for educational infrastructure development. Therefore, optimizing the use of digital media at SMP Negeri 3 Manokwari is not merely an effort to innovate learning but also part of a movement to equalize the quality of education in eastern Indonesia.

## **4. CONCLUSION**

Based on the theoretical study, field data, and discussion that has been described, the following conclusions can be drawn:

1. Social studies teachers at SMP Negeri 3 Manokwari have utilized digital media in their teaching, including PowerPoint presentations, YouTube videos, and the Google Classroom platform. However, their use remains suboptimal and inconsistent due to various technical and non-technical barriers.
2. The main obstacles faced include limited internet infrastructure, limited digital competency of teachers—especially senior teachers—disparity in device ownership among students from low-income families, and a lack of digital content with local West Papuan content.
3. Recommended optimization strategies include strengthening school digital infrastructure, providing systematic and needs-based teacher training, developing participatory digital content with local content, and formulating school policies that support the digital learning ecosystem.

Based on the research findings and conclusions, several suggestions are formulated as follows:

4. Schools should allocate a special budget in the RKAS for the development and maintenance of digital technology infrastructure on an ongoing basis.
5. The West Papua Provincial Education Office needs to design a structured, sustainable, and competency-based digital training program for all social studies teachers at the junior high school level.
6. Social studies teachers need to proactively improve their digital literacy independently by utilizing the Merdeka Mengajar (PMM) Platform and online learning communities that are available free of charge.
7. Further researchers are advised to conduct a more in-depth study using a mixed methods approach to obtain a more comprehensive picture of the impact of digital media utilization on students' social studies learning outcomes in West Papua.

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