



CHALLENGES AND OPPORTUNITIES FOR LEARNING SOCIAL SCIENCES IN THE DIGITAL AGE

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Abstract

This study examines the challenges and opportunities for digital era social studies learning at SMP Negeri 39 Medan. Rapid technological advances open up opportunities and challenges to integrate technology into the learning process as a way to improve the quality of learning. This study aims to determine the challenges and opportunities for digital era social studies learning at SMP Negeri 39 Medan. This study uses a qualitative approach with a descriptive analysis method. Data were collected through observation, interviews, and documentation. The subjects of the study included the principal, social studies teachers, and students of SMP Negeri 39 Medan. The results of the study showed that there were challenges such as technological gaps, lack of teacher readiness, lack of infrastructure and a less conducive school environment. There are also opportunities such as making it easier for teachers to teach, making it easier to access learning without being hindered by distance or time, students becoming more active and creative, learning becoming more interesting, and opportunities to create digital classes that are planned to be realized in the new school year.

Keywords: *Challenges; Opportunities; Social Studies Learning; Digital Era*

Abstrak

Penelitian ini mengkaji tentang tantangan dan peluang pembelajaran IPS era digital di SMP Negeri 39 Medan. Kemajuan teknologi yang sangat cepat membuka peluang serta tantangan untuk mengintegrasikan teknologi dalam proses pembelajaran sebagai salah satu cara untuk meningkatkan mutu pembelajaran. Penelitian ini bertujuan untuk mengetahui tantangan dan peluang pembelajaran IPS Era digital di SMP Negeri 39 Medan. Penelitian ini menggunakan pendekatan kualitatif dengan metode analisis deskriptif. Data dikumpulkan melalui observasi, wawancara, dan dokumentasi. Subjek penelitian meliputi kepala sekolah, guru IPS, dan siswa SMP Negeri 39 Medan. Hasil penelitian menunjukkan bahwa terdapat tantangan seperti kesenjangan teknologi, kurangnya kesiapan guru, kurangnya infrastruktur dan lingkungan sekolah yang kurang kondusif. Terdapat juga peluang seperti mempermudah guru dalam mengajar, mempermudah mengakses pembelajaran tanpa terhalang jarak atau waktu, siswa menjadi lebih aktif dan kreatif, pembelajaran menjadi lebih menarik, dan peluang untuk membuat kelas digital yang rencananya akan di realisasikan di tahun ajaran baru.

Kata Kunci: *Tantangan; Peluang; Pembelajaran IPS; Era Digital*

INTRODUCTION

Education is one of the main foundations in building a thriving and sustainable society.(Rahmawati et al., 2021). Technological developments affect education in facing the changing times. In the digital era, marked by advances in information and communication technology, education systems around the world are heavily influenced by technology. Technology has become an important part of the educational process and changed the paradigm of learning methods.(Bahani1 & Kholid, 2024).

Education today has experienced significant changes influenced by the development of digital technology.(Ningsih, 2024). If in the past education in Indonesia took place in a very traditional form, now education has undergone a transformation towards technology-based education or the digital era.(Pramudya, 2021). This change does not only occur in the aspect of learning media, but also in the pedagogical approach, evaluation methods, and interactions between teachers and students. But now with the presence of digital technology, education is starting to transform into a more flexible and innovative technology-based model.(Liriwati, 2023).

National education has also experienced rapid development, so that elements of education, both formal and informal, must be able to adapt, develop, and improve their capabilities. This is inseparable from the human resources of education needed to implement these developments, especially those related to technological advances in this digital era. These human resources must also be able to use technology to meet educational needs and goals.(Ngongo, 2019). Therefore, to implement and realize quality education and learning, quality human resources are needed.

Digital era education forms life skills through technology, information, and communication. The paradigm of education is changing so that educators are no longer the main source of learning, but become facilitators who help students develop. Changes also occur in educational methods, approaches, and strategies.(Hadi, 2022). By combining technology tools and platforms,

technology-based learning models can improve the quality of education.(Yasin, 2024).

The current generation is very connected to technology, this model is important in the digital era. In accordance with each learning style, this model creates interactive and personal learning that is easily accessible. It also forms the character of students who are independent and cooperative. Technology-based learning can meet learning needs, understand the extent of students' abilities in the learning process, and direct teachers and students to use technology and master it.(Akbar, 2023). Technology has many potential uses in education in Indonesia, especially at the junior high school level, but it still faces many challenges. Both in terms of infrastructure, teacher resources, and technological gaps. This has an impact on the quality of education that has not fully met the requirements of the current information generation. Technology can optimize social studies learning, helping students understand social, cultural, and economic issues in a more interesting and contextual way.

Based on what was found in the pre-research at SMP Negeri 39, there are various challenges that hinder the application of technology in social studies learning. One of the main obstacles in social studies learning is that teachers are unable to use technology. Many teachers still use traditional methods due to age, limited knowledge, and lack of technology training. The situation at SMP Negeri 39 Medan is exacerbated by the lack of facilities such as hardware and a stable internet connection. The condition of the school environment, technological gaps such as students who do not have technological devices are also obstacles in the implementation of digital-based learning. As a result, digital learning is difficult to implement properly, and students cannot take full advantage of it.

SMP Negeri 39 Medan also has the opportunity to overcome these challenges. One of the positive steps being planned by the school is the creation of a digital class which is scheduled to be implemented in the new academic year of 2025. This plan is expected to be the first step for the school to integrate technology in social studies learning and other subjects more optimally. The

implementation of well-planned technology can open up opportunities for the development of learning that is more interactive, fun, and relevant to the needs of today's students.

The overview of the results of the pre-research above shows that, with the challenges and opportunities in social studies learning in the digital era, it is important to conduct research related to the challenges and opportunities faced by schools. This research is able to see the extent of the challenges and opportunities faced by schools in the current digital era, the goal is that educational problems in this digital era can be resolved properly. This digital-based learning can be distributed to all schools in Indonesia so that active learning can be felt by all parties. Therefore, it is hoped that the government will focus more so that education in Indonesia is more advanced and does not lag behind other countries.

RESEARCH METHOD

This study uses a qualitative approach with a descriptive analysis method. According to (Sugiono, 2018), descriptive method aims to describe and analyze data systematically. Qualitative approach is used to understand social phenomena in depth and present informant perspectives in detail in a natural context. (Tabrani, 2015). The research was conducted at SMP Negeri 39 Medan and had several informants in it, namely the principal as the main and key informant, two social studies teachers as key informants, and two students as supporting informants. The researcher conducted interviews using an interview list containing 60 questions (19 questions for the main informant, 23 questions for the key informant, and 18 questions for supporting informants) that had been made according to the needs and objectives of the research. Data were collected through observation, interviews, and documentation, then analyzed descriptively through data reduction by summarizing, organizing, and selecting the main components. Then, the data was presented and conclusions were drawn. The purpose of this study was to determine the challenges and opportunities faced by SMP Negeri 39 Medan in facing the digital era, especially in the context of the social studies learning process.

RESULTS AND DISCUSSION

In this study, researchers used observation and interviews as data collection techniques. Then based on the results of the interview, researchers found how technology is applied in social studies learning, as well as several challenges and opportunities for social studies learning in the digital era at SMP Negeri 39 Medan.

Application of Technology in Social Studies Learning in the Digital Era

The rapid development of technology has brought significant changes in various aspects of life, including in the field of education. Technology has a very important role in supporting the learning process. However, at SMP Negeri 39 Medan, the application of technology in teaching and learning activities is still relatively minimal. This can be seen from the lack of teacher readiness, lack of facilities, poor environmental conditions and technological gaps. This condition is a challenge for schools in presenting learning that is relevant to the development of the times and the needs of students who now live in the digital era. Therefore, it is very important for schools to start improving by increasing the digital literacy of teachers and students, providing adequate technological infrastructure, and encouraging technology-based learning innovations.

As explained from the results of the interview conducted by the researcher with Mrs. Anna Leli Harahap, S.Pd., MM. She explained that, "*The implementation is still lacking because the first obstacle is the condition of the social studies teachers who are already old causing them to be technologically illiterate. Second, I noticed that they do not want to study for a long time and most of them only teach by delivering it.*" The same thing was also expressed by one of the social studies teachers, Dra. Hamimah Lubis, who stated that, "*Yes, but not one hundred percent adjusted to the situation, frankly the infrastructure here is not as we expected, it is still limited, sometimes we have to take turns, with other teachers such as infocus. Then, some classes do not have electricity, because the environment is not supportive.*"

Table 1. Application of Technology in Social Studies Learning in the Digital Era

Aspect	Problem Description
Utilization of technology	Still minimal in teaching and learning activities
Teacher readiness	Teachers are not ready to use technology in the learning process
Facilities and Infrastructure	Limited availability of technological devices (computers, projectors, internet network)
School environment	The physical environment does not support optimal use of technology
Technology Gap	Not all students have adequate digital devices and access

Based on the research results, it can be concluded that the application of technology in learning is still minimal and not optimal. The principal said that one of the main obstacles is the limited ability of teachers to operate technology, especially teachers who are elderly and less interested in learning new technology. In addition, in terms of facilities and infrastructure, teachers said that supporting facilities such as infocus are still limited and must be used alternately between teachers. In fact, there are still classrooms that do not have electricity, thus hampering the use of technological devices. On the other hand, students also face obstacles, where most do not have devices such as cellphones that are adequate to support technology-based learning. This condition shows that both in terms of educators, infrastructure, and student readiness, there are still many challenges that must be overcome to realize comprehensive technology integration in the learning process.

Challenges of Social Studies Learning in the Digital Era

Teacher Readiness

The role of teachers in the digitalization process of learning has a very strategic position in supporting the success of educational transformation in the digital era. Teachers are the main actors in directing, guiding, and facilitating students to be able to learn effectively with the support of digital technology. However, in reality, as found by researchers at SMP Negeri 39 Medan, there are still many teachers who are not fully ready to face technology-based learning. One of the main causes is the relatively older age, which causes difficulties in adapting to technological developments that continue to change dynamically.

Many teachers still tend to use traditional approaches, such as one-way lectures and conventional assignments, which do not involve the active use of digital technology. This method still dominates because it is considered easier to implement and does not require mastery of complex technology. The lack of innovation in the use of interactive learning media, digital applications, and online platforms such as *Learning Management System* (LMS) is caused by limited capabilities and lack of relevant training. Schools as educational institutions often do not provide ongoing training programs to improve teacher capacity in integrating technology into teaching and learning activities. In addition, direct technical assistance to teachers is also still limited, so teachers have difficulty when trying to apply technology independently. As a result, the process of adaptation to digital-based learning is slow and has not touched all aspects of learning, even though the demands of the times require a transformation in the teaching approach to be more responsive to the needs of students in the digital era.

Teachers' mastery of technology is still a challenge in the digitalization process of learning. The low ability to operate digital devices and applications shows that digital literacy among teachers has not reached an adequate level. Many teachers are not yet accustomed to using technology as a tool in the teaching and learning process, both to deliver material, manage classes, and evaluate student learning outcomes. This condition hinders the optimization of technology-based

learning and requires ongoing training and mentoring to improve the digital competence of educators.

In certain subjects, especially Social Sciences (IPS), the integration of technology in learning faces quite significant challenges. IPS teachers often have difficulty in combining learning materials with relevant and interesting digital media, due to limited resources and supporting tools. Limited access to information and communication technology facilities, such as computers, infocus, internet networks, and digital learning materials that are appropriate to the IPS context, are the main obstacles in implementing technology-based learning. This condition causes the teaching process to still be carried out conventionally, without optimal use of technological advances that can actually improve the quality and effectiveness of IPS learning in the digital era.

As explained from the results of interviews conducted by researchers with Mrs. Dra. Hamimah Lubis. He said *"My main challenge is not understanding technology, unlike young teachers today and there are also technological challenges in the school environment, the school has provided infrastructure but the environment does not support the facilities provided by the school can be lost. There are also challenges from the students themselves, many students do not have cellphones."* while the same thing was also conveyed by A student named Muhammad Nabawi said, "Social studies teachers often just use the lecture method, sis."

Based on From the research results, it can be concluded that the main challenge in implementing technology in learning is the limited understanding of teachers regarding the use of technology, especially for older teachers. Unlike young teachers who are more adaptable, older teachers often have difficulty mastering digital devices and media. In addition, the learning methods used are still dominated by lectures, so they do not involve the use of interactive and innovative technology. This causes the learning process to be less varied and does not fully utilize the potential of the available technology.

Lack of Facilities

School facilities play a very important role in supporting the success of learning in the digital era. Without adequate infrastructure support, the process of integrating technology into teaching and learning activities will experience many obstacles. The findings of researchers at SMP Negeri 39 Medan show that school facilities, especially in supporting digital-based social studies learning, are still inadequate. One of the main problems is the availability of electricity that is not evenly distributed across all classes. Several classrooms are known to not have access to electricity because the installation was stolen, which is a major obstacle in the use of technological devices.

The absence of electricity makes devices such as infocus, laptops, and speakers unusable during learning. As a result, the variety of teaching methods is very limited, and teachers have difficulty presenting interesting and interactive learning. In fact, technology can be an important tool in conveying material visually, enriching student understanding, and increasing learning motivation. Without adequate facilities, teachers are forced to return to conventional teaching methods such as lectures or written assignments, so that the potential for innovative technology-based learning cannot be utilized optimally.

Infocus is one of the important tools in supporting interactive visual and digital learning. This tool is very helpful for teachers in delivering material in an interesting way through images, videos, or digital presentations, so that students can more easily understand the concepts presented. However, at SMP Negeri 39 Medan, the number of infocuses available is still very limited and not comparable to the number of classes. This condition requires teachers to use infocuses in turns, which ultimately limits flexibility in arranging teaching strategies.

These limitations have a direct impact on the consistency and effectiveness of the learning process, especially when the material presented requires strong visual support. Teachers cannot optimally plan the use of technology in learning activities because they have to consider the availability of devices. As a result, students lose the opportunity to engage in more engaging and contextual learning

experiences through digital media. In fact, visual-based learning has great potential in increasing students' understanding, engagement, and motivation to learn in today's digital era.

The availability of a stable internet connection is an important component in supporting the integration of technology in the learning process. Adequate internet allows teachers and students to access digital learning resources quickly and efficiently, ranging from learning materials, interactive videos, to online learning platforms. However, at SMP Negeri 39 Medan, the available internet connection is still unstable and has not been able to meet the needs of digital learning as a whole. This network instability often becomes an obstacle in learning activities, especially when teachers want to display web-based materials or when students are asked to search for information independently.

The impact of these conditions is quite significant, especially on the effectiveness and quality of learning. Teachers have difficulty in utilizing various digital learning resources directly, so that the delivery of material is limited to conventional media. On the other hand, students also experience obstacles in developing digital literacy skills due to limited access to the internet that can be used to explore various educational content. As a result, the potential for utilizing information and communication technology to support learning is not optimal, even though digital skills are needed to face the challenges of 21st century education.

The use of technology in learning at SMP Negeri 39 Medan still faces several significant obstacles. The main factors that are obstacles are technical aspects, such as the unavailability of electricity in a number of classrooms, the limited number of infocus, and the unstable internet connection. These three things have a direct impact on the low implementation of technology-based learning methods. Teachers and students have difficulty in implementing digital learning consistently, because the required facilities are not available or can only be used on a limited basis and alternately between classes.

Due to these limitations, the learning process tends to still rely on traditional approaches such as lectures and writing on the board. In fact, technology has great

potential in creating a more interactive, interesting, and in-depth learning atmosphere for students. When access to technology is not adequately available, learning becomes less varied and risks being irrelevant to the demands of education in the 21st century. In this digital era, technological literacy is not only a support, but an important part of the basic competencies that students must have. Therefore, without improving facilities, schools will continue to lag behind in preparing students to face future challenges.

As explained from the results of interviews conducted by researchers with the Social Sciences Teacher (Dra. Hamimah Lubis), he said, "*The technology that mothers use is a cellphone, laptop and an infocus which is occasionally used.*" He also said, "Yes, but it is not one hundred percent adjusted to the situation, frankly the infrastructure here is not as we expected, it is still limited, sometimes we have to take turns, with other teachers such as infocus. Then, some classes do not have electricity, because the environment is not supportive."

Based on the research results, it can be concluded that although technology such as mobile phones, laptops, and infocus have been used in learning, their use is still limited and not optimal due to various constraints. Facilities and infrastructure in schools are inadequate, where some devices must be used alternately between teachers, and there are classrooms that do not yet have access to electricity. In addition, internet network constraints are also an obstacle, because the connection is often unstable and depends on the type of card used. These things show that inadequate infrastructure and connectivity support are still the main challenges in implementing learning technology in schools.

Unfavorable environmental conditions

The security of facilities in the school environment is an important aspect that is often overlooked, but greatly affects the continuity of technology-based learning. The environmental conditions at SMP Negeri 39 Medan are also a factor in why technology in social studies learning is still lacking. This is because, at SMP Negeri 39 Medan, many technological facilities have been lost due to theft, such as electrical cables, electronic devices, and other supporting equipment. This

condition has a direct impact on the stagnation of the use of technological devices in learning, because the facilities that should be used to support the teaching and learning process are no longer available.

Loss of facilities due to theft not only hampers learning activities, but also causes material losses for the school. The lack of adequate security systems and weak supervision make existing devices vulnerable to loss. If this condition continues, efforts to integrate technology in learning will be difficult to achieve sustainably. Therefore, it is important for schools to strengthen security systems, both through direct supervision and through the use of security technology such as CCTV.

Suboptimal management of the school environment also affects the sustainability of technology facilities. Lack of supervision and weak security of inventory items cause various school equipment to be poorly maintained. As a result, devices that should be used to support learning are often damaged or even lost. This irregularity in facility management hinders the effectiveness of technology use in the classroom. Without a good management system, the facilities that schools already have cannot be utilized optimally. Teachers and students have difficulty in using technology-based learning aids, because the condition of the facilities is not maintained or is not available when needed. Therefore, in addition to providing facilities, schools also need to build a good management and supervision system to ensure that existing devices remain safe and can be used optimally.

Limited availability of technology is a major challenge in the digitalization process of learning at SMP Negeri 39 Medan. Many devices are outdated or damaged, so they no longer function properly. When the number of devices is insufficient or their condition is not suitable for use, teachers and students have difficulty implementing technology-based learning effectively. This reduces the opportunity to create innovative learning that is in accordance with the needs of the times.

Lack of maintenance and device updates are also major causes of the hampered use of technology. In some cases, teachers are forced to return to traditional learning methods because there are no devices available to support digital delivery of materials. This condition shows the need for serious attention from schools and the government to provide adequate technological facilities, as well as ensure their availability evenly so that digital learning can run optimally.

Based on the research results, it can be concluded that although schools have tried to provide technological facilities and infrastructure to support the learning process, their implementation still experiences serious obstacles due to an unsupportive environment. Some of the facilities provided are at risk of being lost due to security issues, such as theft, which makes the use of technology less than optimal. In addition, there are still classrooms that do not have electricity due to theft of electrical installations, which further hinders the use of technological devices. This shows that in addition to providing facilities, aspects of security and infrastructure in the school environment also need serious attention so that technology can be used optimally and sustainably.

Technology Gap

Technology in the digital era is very necessary to support technological progress in schools. One of the challenges in implementing technology-based learning at SMP Negeri 39 Medan is the low ownership of technological devices among students. Many students do not have mobile phones, or even adequate internet access. This greatly affects their ability to participate in learning that utilizes digital technology, both online and offline based on electronic media. As a result, the learning process that should be more interactive and technology-based becomes less than optimal and uneven for all students.

This limitation causes a gap in access to information among students. While a small number of students who have devices can explore material more widely via the internet, most others are left behind because they do not have supporting facilities. In the long term, this situation has the potential to widen the

learning gap and weaken the achievement of digital competencies that are the demands of 21st century education. Therefore, support in the form of device assistance and affirmative policies is urgently needed to ensure equal access to technology for all students.

Family economic factors are also one of the main causes of limited student access to learning technology. Many parents of students come from lower-middle economic backgrounds, so spending priorities are more focused on basic needs than buying technological devices or providing internet quotas for their children. This hinders students' active involvement in the digital-based learning process, because not all families are able to provide the necessary facilities.

Lack of parental understanding of the importance of technology-based learning also worsens the situation. Some parents have not realized that the use of technology is not just entertainment, but is an important part of modern education that can support children's future. This condition shows the need for a socialization approach and support from schools and the government, so that parents can better understand the importance of the role of technology in education and contribute to creating an inclusive and adaptive learning ecosystem to the development of the times

As explained from the results of the interview conducted by the researcher with the principal (Anna Leli Harahap, S.Pd., MM): "*The challenge is the students, about the family situation, the economy of the students, that is the challenge, many students in this school still do not have cellphones. Although the teacher is active, the students are not active, that is a challenge for us, especially about the relationship with their parents because parents who think positively and think long term are more interesting to provide learning that will be given to students.*" In line with what was conveyed by the student (Muhammad Nabawi), "The challenge is that many of my friends don't have cellphones and packages or internet, bro."

Based on the results of the study, it can be concluded that one of the main challenges in implementing technology in learning is the condition of the students themselves, especially those related to the family's economic background. Many

students in this school do not yet have devices such as cellphones, and do not have access to adequate internet quota or networks. Although teachers are already active in utilizing technology, student participation is limited due to the limited facilities they have. In addition, the lack of support and understanding from parents is also an obstacle, especially if parents do not see the importance of using technology in learning. These factors indicate that the gap in access to technology is still a major challenge that must be overcome so that the technology-based learning process can run evenly and effectively.

Table 2. Challenges of Social Studies Learning in the Digital Era

Aspect	Condition / problem description	Causal / impact factors
The role of teachers in digitalization	Teachers are less prepared to face technology-based learning	The teachers are relatively older, making it difficult to adapt.
Teaching methods	Teachers still often use traditional methods	Lack of training from schools
Mastery of technology	Low ability of teachers in using digital devices and applications	Low digital literacy
Subject focus	Social studies teachers in particular demonstrated significant challenges in technology integration.	Limited access to information and communication technology tools and facilities.
Electric Current in the Classroom	Some classes do not have access to	Cannot use technological devices such as infocus

	electricity	
Infocus availability	The number of infocus is very limited and must be used alternately between classes.	Disrupting the continuity and effectiveness of visual and digital-based learning
Internet access	Internet connection is not stable	Digital learning processes such as searching for information or using online platforms are hampered.
Use of technology	Limited due to technical constraints above	Teachers and students have difficulty implementing interactive and modern learning methods
Facility security	Many technological facilities are lost due to theft.	Lack of technological devices for learning
Environmental management	Lack of supervision and security of school facilities	Facilities are not well maintained
Availability of technology	The available technological facilities are limited and damaged.	The use of technology in learning is hampered
Student device ownership	Many students do not have technological	Technology-based learning is less than

	devices (cell phones and internet quota)	optimal because student access is limited
Economic conditions	lack of support and understanding from parents	Barriers to learning

Social Studies Learning Opportunities in the Digital Era

Simplifying the Teaching Process

Technological advances, especially in the field of education, have a positive impact on the world of education. At SMP Negeri 39 Medan, it is felt that the use of technology in learning allows teachers to deliver materials more visually and interactively. With the help of devices such as infocus or laptops, teachers can display relevant images, videos, and animations to strengthen students' understanding of the subject matter. This approach makes the learning process more interesting and not monotonous, so that students find it easier to understand the concepts being taught. In addition, the delivery of technology-based materials also encourages teachers to be more creative in designing learning.

Technology opens access for teachers to utilize a variety of learning resources that are more varied and contextual. Not only limited to printed books, teachers can explore sources from the internet such as articles, journals, educational videos, and other interactive media to enrich learning content. This helps teachers in compiling materials that are more relevant to current conditions and adapting to the different learning styles of students. Thus, learning becomes more dynamic and meaningful.

Teachers have the convenience of finding learning materials that are not available in printed books in the digital era. Through the internet, they can access the latest information, materials from international curricula, and additional references that can enrich classroom learning. The ability to search for and select the right information is also part of improving teachers' digital literacy. This is

very helpful especially in lessons that require the latest data and information, so that learning becomes more relevant and contextual.

As explained from the results of interviews conducted by researchers with the Social Sciences Teacher (Dra. Hamimah Lubis): *"My biggest advantage is more effective and efficient, lightens the teacher's work, teachers no longer need to talk much, and learning objectives are achieved faster. And students in learning are more active."*

Based on the research results, it can be concluded that technology in learning provides great benefits for both teachers and students. For teachers, technology makes the teaching process more effective and efficient, lightens the workload, reduces the need to talk a lot, and helps achieve learning goals faster. Meanwhile, for students, technology encourages active involvement in learning and makes it easier to understand the material presented. Thus, technology becomes a tool that greatly supports the creation of a more optimal teaching and learning process.

More Active, Creative and Interesting Learning

With the presence of digital technology, students at SMP Negeri 39 Medan feel that. Digital technology in learning encourages students to be more active and brave in expressing their opinions. This helps build self-confidence and critical thinking skills in responding to material presented by teachers. With access to technology, students become more creative in completing the tasks given. They can easily search for images, videos, or additional materials from various digital sources to support their work. This process not only improves the quality of the tasks produced, but also encourages students to think more broadly and not be fixated on just one source. This creativity is an important provision in forming 21st century skills.

Technology allows students to learn independently without relying entirely on teachers. Through the internet, students can search for additional information, access learning videos, or use educational platforms to deepen material that is not yet understood. This independence fosters a sense of responsibility for their own

learning process, while forming lifelong learning habits that are very important in the digital era.

As explained from the results of interviews conducted by researchers with Student (Muhammad Nabawi), he said "Yes, sis, for example, we work in groups by making pictures and looking at cellphones together to complete group assignments." in line with what was said by the Student (Nur Cahaya): More creativity, sis.

Based on the research results, it can be concluded that the use of technology in social studies learning greatly helps to increase students' interest, participation, and creativity. With the support of technology, students become more interested in learning, more courageous in expressing their opinions, and active in group discussions. Easy access to information via the internet, such as using Google, makes it easier for students to find references and complete assignments, especially in collaborative activities such as group work. This not only encourages students to be more active, but also develops their creativity in completing assignments innovatively and independently.

Creating a Digital Classroom

SMP Negeri 39 Medan plans to implement digital classes that will begin in the new academic year of 2025. This step is part of an effort to modernize the learning system to be more relevant to technological developments and the needs of the times. The selection of the implementation time aims to provide sufficient time for all related parties including teachers, students, and parents to make various preparations, both in terms of technical aspects, understanding concepts, and adjusting learning methods. With an adequate preparation period, it is hoped that the transition process to digital learning can take place gradually, in a structured manner, and with minimal obstacles.

As a concrete form of SMP Negeri 39 Medan's commitment to supporting digital transformation in the educational environment, the school will provide digital device facilities in each classroom. These devices can be laptops or computers that are adjusted to the learning needs of each subject. By providing

these devices, students are no longer required to bring personal devices from home, thus reducing the risk of damage or loss of valuables and avoiding social disparities between students who have sophisticated devices and those who do not. This step is expected to strengthen a technology-based learning culture and accelerate the process of student adaptation to the digital learning system that will be implemented comprehensively in the future.

The digital classroom at SMP Negeri 39 Medan is designed with the principle of inclusivity so that all students, without exception, can access and enjoy the benefits of technology-based learning. The school realizes that not all students have personal devices such as *asmobile phone* or adequate laptops to support digital learning activities. Therefore, as an anticipatory and solution-oriented step, schools provide digital device facilities directly in the classroom so that every student can participate actively and equally in the learning process.

The implementation of the digital system at SMP Negeri 39 Medan has had a significant positive impact on students' learning burden, especially in terms of reducing the physical burden that has been caused by the need to carry many textbooks every day. Through the digital class program, all teaching materials will be packaged in digital format and integrated into devices that have been provided in each classroom, such as tablets or computers. Thus, students can directly access learning materials from these devices without having to carry heavy printed books.

As part of learning innovations that are in line with technological developments and modern educational approaches, SMP Negeri 39 Medan has taken a progressive step by eliminating the traditional homework system. This decision is not just a technical change, but part of a paradigm shift in education that places learning effectiveness and student well-being as top priorities. As a replacement for homework, students will be involved in various digital learning activities designed to be carried out fully during school hours.

As explained from the results of the interview conducted by the researcher with the principal (Anna Leli Harahap, S.Pd., MM), he said "*Technology plays a very important role in this digital era. In SMP Negeri 39, I will program this*

digital learning in the new school year. But it is still in the planning stage. I will create a digital class for students, students only need to bring a notebook/laptop."

Based on the research results, it can be concluded that in today's digital era, technology plays a very important role in the world of education. Realizing this, SMP Negeri 39 Medan plans to implement digital learning as part of a new program in the upcoming school year. Although still in the planning stage, this step shows the school's commitment to adapting to technological developments and improving the quality of learning. Through the digital class program, students will only need to bring a notebook or laptop as a learning tool, which is expected to support a more modern, interactive, and efficient learning process.

Table 3, Opportunities for Social Studies Learning in the Digital Era

Aspect		Information
Delivery of material	of	Makes it easier for teachers to deliver lesson materials visually and interactively
Variation of learning resources	of	Enables teachers to search for and use a wider variety of materials
Access to information	to	Teachers can search for materials that are not available in printed books.
Learning activity		Students become more active and brave in expressing their opinions.
Creativity		Students are more creative in doing assignments, such as looking for pictures and additional materials.
Execution time		New academic year 2025
Facilities Provided		Schools provide digital devices in the classroom, so students do not need to bring personal devices.
Technology		Students who do not have a cellphone can still take part in digital

Access for All	learning equally.
Reducing the study load	Students do not need to bring a lot of books
Task system	Homework will be eliminated, replaced with integrated digital activities in schools.

Paul Glistner's Digital Skills Theory as a Unit of Analysis of Challenges and Opportunities for Social Studies Learning in the Digital Era at SMP Negeri 39 Medan.

The theory used in the study entitled "Challenges and Opportunities for Social Studies Learning in the Digital Era at SMP Negeri 39 Medan" is the theory of digital skills. Paul Glistner said that digital skills are the ability to find, assess, use, and communicate with information obtained through digital technology.(Pradana & Widiastomo, 2023). At SMP Negeri 39 Medan, the implementation of digital literacy faces a number of challenges, but also opens up various opportunities that can be utilized to improve the quality of learning, especially in Social Sciences (IPS) subjects.

According to Glistner, one of the main components of digital literacy is the ability to access and use technology. In the environment of SMP Negeri 39 Medan, the challenges faced are quite complex. Many students do not have devices such as mobile phones and adequate internet access, so the technological gap is a major obstacle. In addition, some teachers, especially the elderly, still have difficulty using digital devices due to lack of training and interest in new technologies. Limited school facilities, including classrooms without electricity, also exacerbate this condition. However, there are promising opportunities, such as the school's plan to provide digital classes, as well as the role of young teachers who are more familiar with technology and can be role models for their colleagues. This shows that although basic skills in accessing technology are still low, efforts towards improvement are being pioneered.

The next component is the ability to assess and verify information. The minimal use of technology in learning causes this skill to be less honed. However, with students becoming more active in searching for information via the internet, there is an opportunity to integrate information literacy training, such as evaluating the credibility of sources and understanding the content. Independent use of the internet by students is a good starting point, although the learning method which is still predominantly lecture makes this skill not yet optimally developed.

The ability to communicate and collaborate digitally also still faces major challenges due to limited devices and infrastructure. However, simple collaboration practices have begun to appear, such as group work using mobile phones to search for images or supporting information for assignments. This activity can be the basis for the development of more formal digital communication and collaboration, such as the use of Google Classroom and WhatsApp learning groups.

the ability to think and use technology ethically is an important aspect of digital literacy. Ethical challenges arise from real-life situations, such as theft of school facilities, which reflects a lack of collective responsibility in maintaining educational facilities. However, the gradual implementation of technology allows schools to begin integrating the values of digital ethics and critical thinking into the curriculum, especially in social studies lessons that discuss social and cultural issues. This is in line with Glister's emphasis on the importance of ethics in the use of technology.

Another component is the ability to produce and create digital content. Currently, not many students or teachers are able to produce content such as learning videos, blogs, or digital presentations, due to limited devices and the unfamiliarity with the use of technology in teaching and learning activities. However, the potential begins to appear when students start to compile assignments digitally and search for images via the internet. With the plan to provide a digital class, it is hoped that there will be a wider space for students and teachers to produce learning content independently and creatively.

the ability to adapt to technological changes is still a major challenge for senior teachers who are less familiar with new technologies and have not received adequate training. Schools also do not have a structured ongoing training system. Even so, the digital program development plan shows that schools are beginning to realize the importance of adapting to the times. Young teachers who are more adaptive to technology can also act as agents of change and mentors for other teachers.

Paul Gilster's digital literacy skills theory provides a strong framework for understanding the challenges and opportunities of social studies learning at SMP Negeri 39 Medan. Each component of the theory is directly reflected in real conditions in the field. The main challenges revolve around limited devices, facilities, and human resource readiness (teachers and students). Great opportunities arise from school initiatives in forming digital classes and the presence of a young generation of teachers who are adaptive to technology. With a strategic and collaborative approach, social studies learning in the digital era can be improved to form students who are not only technologically literate, but also able to think critically, ethically, and creatively in utilizing technology.

Challenges and Opportunities for Social Studies Learning in the Digital Era at SMP Negeri 39 Medan

Technological developments have changed almost all aspects of human life, including education.(Sinaga & Firmansyah, 2024). The paradigm of education has been changed by digital transformation, which has had a major impact on teaching and learning methods.(Sindi Septia Hasnida et al., 2023). The digital era allows for a more flexible approach to social studies learning that is tailored to individual needs.(Aisyah, 2024). The digital era is marked by the widespread use of technological devices which are currently developing rapidly.(Lestari, 2018). In the world of education, Indonesia has been influenced by the digital era, with many opportunities and obstacles. On the one hand, digital technology allows more people to get educational resources. Libraries, online

learning platforms, and educational videos. However, the adoption of this technology also has challenges (Nurhemah, 2024).

The role of teachers in the digital era is very important in supporting educational transformation. Teachers are not only required to master the subject matter, but must also be able to use technology as a learning tool. Unfortunately, at SMP Negeri 39 Medan, there are still many teachers who are not ready to face this change. They tend to continue using conventional methods because they find it difficult to keep up with technological developments, especially for older teachers. The lack of technology training from the school also exacerbates this condition.

Limited facilities are also a major obstacle in supporting the digital-based teaching and learning process. Many classrooms at SMP Negeri 39 Medan do not yet have electricity, so tools such as projectors cannot be used. The number of devices available is also very limited and must be used alternately between classes. Not only that, an unstable internet connection is also a major obstacle in optimizing the use of technology during learning. The school environment also faces its own challenges. Several digital learning support facilities have been damaged or lost due to the actions of irresponsible parties. This has a direct impact on the declining quality and availability of learning facilities, especially those based on technology. As a result, schools have difficulty providing adequate devices and facilities for teachers and students.

The technological gap between students is also a serious problem. Not all students have personal devices such as mobile phones or tablets that can be used for digital learning. This causes unequal access to technology-based learning materials. Students who do not have devices will be left behind compared to their friends who have more complete facilities at home. The use of technology still opens up great opportunities in the world of education. Despite facing various obstacles, teachers feel helped because they can access materials from various sources, not limited to textbooks alone. They can also deliver materials in more interesting and varied ways. This certainly makes the teaching process easier and

improves student understanding. Students also show a positive response to technology-based learning. They become more active in discussions, seek additional information independently, and complete assignments more creatively. The use of digital media makes social studies lessons feel more real and not boring like traditional lecture methods.

As a response to the changing times, SMP Negeri 39 Medan plans to launch a digital class program in the 2025 academic year. This program aims to provide digital devices evenly to students, so that they no longer need to carry a lot of books or rely on personal devices. With this step, it is hoped that all students will have the same opportunity to experience the maximum benefits of digital learning.

In line with the results of research conducted by (Safitri, 2025), that technology is indeed very crucial in learning in this digital era. but there are still challenges that must be faced, some of the challenges found by Syafirti in her research are the digital access gap, information overload, teaching methods, and digital security and ethics. In addition to challenges, there are also opportunities such as access, unlimited information, interactive learning, and relevant learning. Research results (Safitri, 2025) have similarities with the results obtained by researchers.

The application of technology in the world of education is not free from a number of challenges. However, in the midst of the rapid development of the era, there are also various opportunities that can be utilized from the use of this technology. Therefore, challenges should not be seen as absolute obstacles in the teaching and learning process, but rather as a driver to create new opportunities that are more innovative and relevant in the future.

CONCLUSION

Social studies learning in the digital era at SMP Negeri 39 Medan faces various challenges and opportunities. The main challenges include the lack of teacher readiness in mastering technology, limited facilities and infrastructure

such as electricity and internet connection, less supportive school environment conditions, and the technological gap among students who do not all have digital devices. However, on the other hand, digital technology provides a great opportunity to facilitate the teaching process, making learning more active, creative, and interesting for students. In addition, the plan to implement digital classes in the new school year is a strategic step to overcome the access gap and improve the quality of learning. Overall, despite the obstacles, the digital era opens up new opportunities that can be utilized to improve the quality of education and create more inclusive and effective learning.

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