
TEACHERS' DIGITAL PEDAGOGICAL SKILLS AND EFFECTIVENESS OF LESSON DELIVERY

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ABSTRACT

This study aimed to assess the digital pedagogical skills of teachers and the effectiveness of lesson delivery. This study used a descriptive correlational research design to examine the relationship between teachers' digital pedagogical skills and effectiveness in delivering lessons in Kadingilan 1 District. The findings revealed that teachers possess a high level of digital pedagogical skills in terms of digital content creation, use of educational technology tools, and assessment of digital learning in teaching Social Studies. The results also showed that the level of effectiveness of lesson delivery as perceived by teachers is at a very high level. The study further revealed a significant relationship between teachers' digital pedagogical skills and the effectiveness of lesson delivery, indicating that higher levels of digital competence are associated with more effective teaching performance. This means that teachers who are skilled in creating digital content, utilizing educational technology tools, and implementing digital assessments are more likely to deliver engaging, organized, and responsive lessons. Their ability to strategically integrate technology into instruction strengthens classroom interaction, improves assessment practices, and enables data-driven instructional adjustments. Consequently, enhancing teachers' digital pedagogical skills can significantly contribute to improving the overall quality and effectiveness of lesson delivery in Social Studies. These suggest that teachers may continue to enhance their digital pedagogical skills through targeted professional development, workshops, and hands-on training focused on advanced content creation, interactive technologies, and innovative assessment strategies. Schools may also provide access to updated digital tools, resources, and support systems to enable teachers to experiment with new instructional methods.

Teachers maintain and further enhance their effective lesson delivery by continuously updating their teaching strategies and integrating innovative digital resources.

KEYWORDS: *Digital Pedagogical skills, digital content creation, use of educational technology tools, assessment of digital learning, lesson delivery.*

INTRODUCTION

The rapid integration of digital technologies into education has significantly transformed how lessons are planned, delivered, and assessed. In today's classrooms, especially in basic education, teachers are increasingly expected to use digital tools such as learning management systems, multimedia presentations, online assessments, and interactive applications. However, the effectiveness of lesson delivery largely depends on teachers' digital pedagogical skills—their ability not only to use technology, but to integrate it meaningfully into teaching strategies. Investigating teachers' digital pedagogical skills is therefore relevant, as it directly influences student engagement, comprehension, and learning outcomes in a technology-driven educational environment.

The relevance of this problem is further emphasized by the shift to blended and flexible learning modalities. Experiences during emergency remote teaching highlighted gaps in teachers' preparedness to use digital tools effectively. While many teachers were able to access technology, not all were equipped with the pedagogical knowledge to align digital tools with learning objectives. This resulted in lessons that were either overly content-driven or technically focused, rather than learner-centered. Addressing this problem helps identify areas where teachers need support to ensure that digital lesson delivery remains effective, inclusive, and aligned with curriculum standards.

Another important reason this problem is relevant is its impact on students' learning experiences. Teachers with strong digital pedagogical skills can design interactive lessons that cater to diverse learning styles, promote collaboration, and encourage critical thinking. Conversely, limited digital skills may lead to passive learning, technical disruptions, and reduced student motivation. By examining the relationship between teachers' digital pedagogical skills and lesson delivery effectiveness, schools can better understand how teaching practices affect learners' academic engagement and overall performance.

The problem is also relevant to educational leaders and policymakers. Findings from studies on digital pedagogical skills can inform professional development programs, technology integration plans, and teacher training curricula. In the context of continuous educational

reforms and the Department of Education's push for ICT integration, understanding teachers' competencies is essential for allocating resources effectively. This ensures that investments in digital infrastructure are matched with teachers' capacity to use these tools productively in the classroom.

Finally, the choice of this problem is justified by the need to prepare teachers and students for the demands of the 21st century. Digital literacy and effective technology use are no longer optional but essential skills in education and the workplace. By focusing on teachers' digital pedagogical skills and their influence on lesson delivery, this study contributes to improving instructional quality, strengthening teaching effectiveness, and supporting sustainable digital transformation in education.

Conceptual Framework of the Study

This study was anchored on the Technological Pedagogical Content Knowledge (TPACK) framework by Koehler and Mishra (2018). This framework emphasizes the integration of technology, pedagogy, and content knowledge as essential components for effective teaching in the digital age. According to Koehler and Mishra (2018), teachers must not only possess content expertise and pedagogical strategies but also develop technological proficiency to design meaningful learning experiences. The TPACK framework highlights that the intersection of these three domains enables teachers to maximize digital tools for interactive, student-centered, and contextually relevant instruction.

Connecting this framework to the study, the TPACK model provides a strong basis for examining teachers' digital skills in Social Studies classrooms. Since Social Studies requires fostering critical thinking, civic awareness, and historical inquiry, teachers must use digital technologies not just as supplements but as integral tools to engage learners in analysis, collaboration, and exploration of diverse sources. Applying the TPACK lens, this study underscores the need for teachers to blend digital literacy with their pedagogical approaches and subject matter expertise. In this way, the framework guides the investigation into how well-prepared teachers are to harness digital skills for improving the delivery of Social Studies lessons in today's technology-driven educational environment.

Digital Content Creation

The level of teachers' digital pedagogical skills in terms of digital content creation has a strong relationship with students' perception of lesson delivery in Social Studies, as students are more engaged and motivated when teachers design interactive and visually appealing learning materials. Digital content such as multimedia presentations, infographics, and

interactive modules not only make abstract concepts more concrete but also help students retain knowledge effectively. When teachers demonstrate proficiency in creating relevant digital content, students perceive the lessons as more meaningful, updated, and aligned with real-world contexts, which in turn enhances their interest and participation in class discussions.

Use of Educational Technology Tools

The relationship between teachers' skills in using educational technology tools and students' perception of Social Studies delivery lies in the ability of these tools to create a dynamic, student-centered learning environment. When teachers effectively integrate technology, such as learning management systems, virtual maps, simulations, or collaborative platforms, students perceive the lesson as more accessible and interactive. The appropriate use of these tools also promotes inclusivity by addressing diverse learning styles, thereby increasing students' confidence in engaging with lesson content. As a result, students view teachers who skillfully apply technology tools as more competent and effective in delivering Social Studies.

Assessment of Digital Learning

Teachers' digital pedagogical skills in assessing digital learning are closely related to how students perceive fairness, clarity, and effectiveness in Social Studies lessons. When teachers use digital platforms to provide timely feedback, track progress, and apply varied forms of assessment such as online quizzes, digital portfolios, and interactive activities, students recognize that their learning outcomes are properly evaluated. This strengthens their perception of the lesson delivery as comprehensive and learner-focused. Moreover, effective digital assessment enables students to reflect on their performance, fosters accountability, and encourages continuous improvement, thus reinforcing their appreciation of the teacher's digital competence.

Significance of the Study

This study was conducted because the researcher believes that it would benefit and provide significance to the following people:

To the teachers. Teachers' digital skills in delivering Social Studies lessons benefit educators by enhancing their instructional efficiency, creativity, and adaptability in the classroom. Through the use of digital tools and platforms, teachers can create interactive and engaging

lessons that foster a better understanding of complex topics. These skills also promote professional growth, as teachers become more confident in integrating technology, allowing them to meet the demands of 21st-century education and improve their teaching effectiveness.

To the learners. For learners, teachers' digital skills provide more interactive, personalized, and student-centered learning experiences in Social Studies. The integration of multimedia resources, online platforms, and digital assessments allows students to actively engage in lessons, collaborate with peers, and develop critical thinking skills. This exposure to technology not only enhances academic performance but also equips learners with digital literacy, preparing them for future academic and professional environments.

To the school. Digitally skilled teachers contribute to the institution's reputation as an innovative and technology-driven learning community. Their effective use of digital tools supports the school's goals of delivering quality education, improving student outcomes, and fostering a culture of innovation. Furthermore, the integration of digital skills helps schools optimize resources, encourage collaboration among faculty, and align with educational standards that emphasize technology integration.

To future researchers. For future researchers, the study of teachers' digital skills in Social Studies delivery provides a valuable foundation for further academic inquiry. It highlights areas of strength and challenges in digital integration, offering insights that can inform future research on teaching practices, technology adoption, and curriculum development. This study can also serve as a reference for developing new strategies and models that enhance digital pedagogy, ensuring continuous improvement in the teaching and learning process.

Definition of Terms

For a better understanding of the study, the following terms are operationally defined:

Digital Content Creation. Digital Content Creation refers to the level of digital pedagogical skills of teachers in terms of digital content creation refers to their ability to design, produce, and adapt digital learning resources that are engaging, relevant, and aligned with the curriculum. This includes skills in creating multimedia presentations, interactive modules, educational videos, and digital simulations that support diverse learning styles. Teachers with strong digital content creation skills can personalize materials to meet learners' needs, integrate real-world examples, and foster critical thinking in Social Studies.

Use of Educational Technology Tools. Use of Educational Technology Tools refers to the level of digital pedagogical skills of teachers in terms of the use of educational technology

tools, which pertains to their competence in selecting, applying, and managing digital platforms and applications that enhance teaching and learning. This involves the effective use of tools such as learning management systems (LMS), online collaboration apps, virtual classrooms, and digital communication channels to facilitate instruction and interaction. Teachers skilled in this area can maximize technology to improve student engagement, collaboration, and accessibility in Social Studies lessons.

Assessment of Digital Learning. Assessment of Digital Learning refers to the level of digital pedagogical skills of teachers in terms of assessment of digital learning refers to their capacity to design, implement, and interpret digital-based assessments that measure students' knowledge, skills, and competencies. This includes the use of online quizzes, e-portfolios, interactive assessments, and data analytics tools to track student progress and provide timely feedback. Teachers who excel in this skill area ensure that digital assessments are valid, reliable, and aligned with learning objectives, particularly in evaluating higher-order thinking in Social Studies.

Social Studies Lesson Delivery. Social Studies Lesson Delivery to the level of digital pedagogical skills of teachers in terms of Social Studies lesson delivery is defined as their ability to integrate technology effectively in presenting historical, cultural, political, and social concepts in ways that are interactive and meaningful. This involves using digital storytelling, virtual field trips, multimedia resources, and collaborative platforms to bring Social Studies topics to life. Teachers with strong skills in this domain can contextualize content, foster civic engagement, and develop learners' critical analysis of societal issues through technology-enhanced instruction.

The Methodology

This study employed a descriptive correlational research design to examine the relationship between teachers' digital pedagogical skills and effectiveness in delivering lessons in the Kadingilan 1 District. The descriptive aspect identified the current level of digital pedagogical competencies among Social Studies teachers, while the correlational component determined whether there is a significant relationship between these skills and selected variables. Data was collected through validated survey questionnaires and classroom observations, and statistical tools were used to analyze patterns and correlations among the variables.

The procedures include securing permissions from school authorities, distributing the questionnaires to the participants, collecting academic records with proper consent, and

statistically analyzing the data using Pearson's correlation coefficient to determine the relationship between the extent of game-based learning use and students' mathematics performance.

Research Locale

This study was conducted in Kadingilan 1 district. The rapid advancement of technology has transformed teaching and learning practices worldwide, including in the Philippines. In Kadingilan 1 District, teachers are increasingly expected to integrate digital tools into their lessons to enhance student engagement and learning outcomes. However, the level of digital pedagogical skills among teachers, particularly in the context of Social Studies, remains uncertain. The district is composed of schools with varying access to technology, which may affect teachers' ability to create digital content, use educational technology tools effectively, and assess students' digital learning performance.

Understanding the digital pedagogical skills of teachers in Kadingilan 1 District is highly relevant because it directly impacts the effectiveness of lesson delivery and the students' learning experience. Social Studies, being a subject that combines knowledge of history, culture, society, and civic responsibility, benefits greatly from technology-enhanced instruction. Teachers who can skillfully use digital tools and design engaging digital content are better positioned to facilitate understanding, critical thinking, and active participation among students.

Moreover, assessing the relationship between teachers' digital pedagogical skills and lesson delivery effectiveness provides local educational stakeholders—such as school administrators, district supervisors, and the Department of Education—with actionable insights. These findings can guide professional development programs, targeted teacher training workshops, and allocation of technological resources in the district.

Respondents of the Study

The respondents of the study are the ninety-seven (97) Social Studies teachers in Kadingilan 1 District, for the school year 2025-2026.

Sampling Procedure

The study employed total enumeration sampling to determine the digital pedagogical skills of teachers in terms of Digital content creation, Use of educational technology tools, and Assessment of digital learning in teaching Social Studies in Kadingilan District 1. All

teachers from the public elementary schools within the district during the School Year 2025–2026 were included as respondents. This sampling technique was chosen to ensure comprehensive coverage of the population, allowing the researcher to gather accurate and reliable data from every teacher in the district without omitting any subgroup.

Research Instrument

This study used an adapted questionnaire from Blanco (2019). The instrument that was used in gathering the necessary data is a questionnaire composed of 2 parts. Part 1 deals with digital pedagogical skills of teachers in terms of Digital content creation, Use of educational technology tools, and Assessment of digital learning in teaching Social Studies. Part II is about the level of effectiveness of Social Studies lesson delivery as perceived by teachers. The questionnaire was patterned and modified in order to fit the settings of the study.

To ensure the validity of the research instrument, the adapted questionnaire from Blanco (2019) underwent careful review and modification to align with the specific context of teaching Social Studies. Expert validation was sought from educators and researchers knowledgeable in digital pedagogy and Social Studies instruction to ascertain that the items accurately measured the constructs of digital pedagogical skills and lesson delivery effectiveness. This process helped establish content validity, ensuring that the questions were clear, relevant, and representative of the intended domains. Regarding reliability, the questionnaire was pilot-tested with a small group of Social Studies teachers outside the main study sample. The responses were analyzed using statistical measures, such as Cronbach’s alpha, to assess the internal consistency of the instrument. The results indicated a high level of reliability, confirming that the questionnaire consistently captured the targeted information and could be confidently used to gather data for the main study.

Scoring Procedure

The data were processed and interpreted using the rating scales below. For the digital pedagogical skills of teachers in terms of Digital content creation, Use of educational technology tools, and Assessment of digital learning in teaching Social Studies, and about the level of effectiveness of lesson delivery as perceived by teachers, this scale was used.

Level of Digital Pedagogical Skills

Scale	Interval	Response Category	Qualitative Description
5	4.20-5.00	Always	Very High Level
4	3.40-4.19		

		Often	High Level
3	2.60-3.39	Sometimes	Moderate Level
2	1.80-2.59	Rarely	Low Level
1	1.00-1.79	Never	Very Low Level

Level of Effectiveness of Lesson Delivery

Scale	Interval	Response Category	Qualitative Description
5	4.20-5.00	Always	Very High Level
4	3.40-4.19	Often	High Level
3	2.60-3.39	Sometimes	Moderate Level
2	1.80-2.59	Rarely	Low Level
1	1.00-1.79	Never	Very Low Level

Statistical Treatment of Data

The following statistical tools were applied to analyze and interpret the data of this study:

Mean and standard deviation were used to determine the Level of digital pedagogical skills.

Mean and standard deviation were used to determine the Level of Effectiveness of Lesson Delivery.

Pearson r Product-Moment Correlation Coefficient, or Pearson r, was utilized to find out the significant relationship between digital pedagogical skills and the Level of Effectiveness of Lesson Delivery.

Findings

Presented below were the findings derived from this study.

The findings revealed that teachers possess a high level of digital pedagogical skills in terms of digital content creation, use of educational technology tools, and assessment of digital learning in teaching Social Studies. This indicates that teachers are competent in developing interactive and meaningful digital instructional materials, effectively utilizing various educational technologies to enhance classroom engagement, and implementing appropriate digital assessment strategies to monitor student progress. Their ability to design aligned online assessments, analyze results, provide timely feedback, and adjust instruction accordingly reflects a strong integration of content, pedagogy, and technology consistent with the TPACK framework.

The results also showed that the level of effectiveness of lesson delivery as perceived by teachers is at a very high level. This implies that teachers are confident in delivering well-structured, engaging, and goal-oriented lessons that actively involve students in the learning process. The integration of digital tools and resources likely enhances clarity of content

presentation, promotes interaction, and supports differentiated instruction, thereby increasing student motivation and participation. A very high level of effectiveness further suggests that teachers are able to manage digital learning environments efficiently, facilitate collaborative activities, and ensure that instructional objectives are successfully achieved.

The study further revealed a significant relationship between teachers' digital pedagogical skills and the effectiveness of lesson delivery, indicating that higher levels of digital competence are associated with more effective teaching performance. This means that teachers who are skilled in creating digital content, utilizing educational technology tools, and implementing digital assessments are more likely to deliver engaging, organized, and responsive lessons. Their ability to strategically integrate technology into instruction strengthens classroom interaction, improves assessment practices, and enables data-driven instructional adjustments. Consequently, enhancing teachers' digital pedagogical skills can significantly contribute to improving the overall quality and effectiveness of lesson delivery in Social Studies.

CONCLUSIONS

The following were the conclusions derived from the results of the study.

The results of the study indicate that teachers possess a high level of digital pedagogical skills in terms of digital content creation, use of educational technology tools, and assessment of digital learning in Social Studies. These skills enable teachers to design engaging and interactive lessons, integrate technology effectively, and utilize digital assessments to monitor and enhance student learning.

The study revealed that the level of effectiveness of lesson delivery, as perceived by teachers, is interpreted as very high. Teachers are confident in explaining Social Studies concepts clearly, engaging students, and integrating both traditional and digital teaching methods. Their ability to provide timely feedback, manage classroom activities, and assess learning outcomes reflects strong instructional competence. Overall, these findings indicate that teachers deliver lessons that are both effective and engaging, contributing positively to student understanding and interest.

The study revealed a significant relationship between teachers' digital pedagogical skills, including digital content creation, use of educational technology tools, and assessment of digital learning, and the effectiveness of lesson delivery in Social Studies. This indicates that higher digital competence is associated with more effective, engaging, and well-structured lessons. Teachers who are proficient in these skills are better able to adapt instruction,

monitor learning, and integrate technology meaningfully. Overall, digital pedagogical skills play a crucial role in enhancing instructional quality and student outcomes.

Recommendations

The following were the recommendations from the results of the study.

Teachers may continue to enhance their digital pedagogical skills through targeted professional development, workshops, and hands-on training focused on advanced content creation, interactive technologies, and innovative assessment strategies.

Schools may provide access to updated digital tools, resources, and support systems to enable teachers to experiment with new instructional methods.

Teachers maintain and further enhance their effective lesson delivery by continuously updating their teaching strategies and integrating innovative digital resources.

Teachers may continue to develop their digital pedagogical skills through targeted professional development and hands-on training. Schools should provide support in the form of updated digital tools, resources, and collaborative platforms for sharing best practices. Emphasis should also be placed on integrating innovative technologies and digital assessment strategies into lessons. Strengthening these skills will further improve lesson delivery, student engagement, and overall learning outcomes in Social Studies.

Future researchers are encouraged to further examine teachers' digital pedagogical skills by incorporating mixed-method approaches, such as classroom observations and interviews, to complement self-reported data and provide deeper insights into actual instructional practices. Expanding the scope of the study to include different subject areas, grade levels, school settings, and larger or more diverse samples would also enhance the generalizability of findings. Additionally, future studies may explore other variables such as student academic performance, learner engagement, digital literacy levels, and institutional support to determine how these factors mediate or moderate the relationship between digital pedagogical skills and lesson delivery effectiveness. Longitudinal research designs are likewise recommended to assess how teachers' digital competencies evolve and how sustained professional development initiatives influence instructional quality and student outcomes.

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