

Research Article

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The Degree of Social Studies Teachers' Possession of Digital Teaching Skills

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Abstract

Background/purpose. This study aimed to investigate the degree to which social studies teachers in Jordan possess digital teaching skills and to examine whether there are statistically significant differences based on professional experience. The study highlights the increasing importance of digital competencies in education, particularly in the aftermath of COVID-19, where digital integration has become a necessity.

Materials/methods. A descriptive research methodology was employed. Data were collected using a 30-item questionnaire administered to a randomly selected sample of 100 male and female social studies teachers across Jordan. The validity and reliability of the instrument were confirmed through pilot testing, Cronbach's Alpha, and Pearson correlation analyses. Descriptive statistics (means and standard deviations) and inferential statistics (t-tests and ANOVA) were applied to analyze the data and test the research hypotheses.

Results. The findings revealed that the overall level of digital teaching skills among participants was moderate. In addition, the results indicated that there were no statistically significant differences at the significance level of ($\alpha = 0.05$) in teachers' digital teaching skills attributable to the variable of professional experience.

Conclusion. The study concludes that, regardless of professional experience, many social studies teachers possess only a moderate level of digital proficiency, which may limit the effective integration of technology in classrooms. The study's unique contribution lies in identifying specific areas of digital skill gaps among social studies teachers in Jordan. Accordingly, it emphasizes the need for well-designed, targeted professional development programs and practical interventions to enhance teachers' digital teaching skills in line with the evolving demands of modern education.

1. Introduction

1.1. Background of the Study

Rapid technological advancements have permeated all aspects of life, including the fields of education and learning. The integration of technology into the educational process has become essential, prompting educational institutions to meet the demands of the digital age by replacing traditional learning environments with modern ones and transitioning towards digital learning pathways. This shift has significantly reshaped the educational landscape, particularly in light of the COVID-19 crisis, which led to increased reliance on digital technologies by educational institutions. As a result, the integration of technology into teaching practices has become imperative within digital learning environments, highlighting the necessity for teachers to develop digital teaching skills to effectively deliver educational content to learners.

Digital teaching skills have enhanced the role of teachers amid educational technology, aiding them in facilitating learning and helping students achieve acceptable levels of academic performance and higher-order thinking skills. These skills involve digitally planning, executing, and evaluating lessons, allowing teachers to effectively employ technology in curriculum delivery while engaging with advanced and essential tools for such skills. This transformation requires the development of digital teaching competencies through continuous and sustained training of teachers, providing them with the knowledge and experiences needed to successfully apply digital skills in education. This can be achieved through the design of professional development programs tailored to teachers' digital teaching skill needs, prioritizing hands-on training in digital tools and modern educational strategies intended for classroom application.

This digital shift imposed new responsibilities on teachers within educational institutions, necessitating the acquisition of new capabilities, knowledge, and skills that align with current scientific and technological advances, as well as challenges presented by the information and digital revolution. Beyond subject-specific knowledge, modern teaching and learning processes rely on the effective application of contemporary technologies. Hence, educational institutions require highly skilled digital teachers, as "the essential pathway to teacher qualification involves acquiring modern educational competencies, with electronic and digital skills leading the way" (Al-Sunaiti, 2020). A teacher's proficiency in the digital age is not measured solely by their knowledge but by their possession and effective application of digital teaching skills.

Social studies teachers, in particular, must acquire these skills, as they are essential for all educators regardless of their specialization. "Social studies is one of the core subjects in educational curricula due to its social nature, linking both temporal and spatial dimensions, and thus fostering a conducive environment to prepare generations capable of living in their society while keeping pace with social, economic, and cultural developments in other societies" (Al-Zaidi & Al-Nawfali, 2021, p. 21).

Therefore, social studies are one of the key disciplines in which it is critical to impart its concepts and knowledge effectively, given its role in nurturing learners' creativity, innovation, and comprehensive thinking skills, as well as developing their personal, scientific, and cultural inclinations and their sense of national values and ethics. Consequently, "teaching and learning social studies necessitate a range of components, including an innovative social studies teacher equipped with the competencies required to achieve educational goals, develop classroom strategies, and employ technology to achieve scientific, practical, and applied understanding" (Al-Amiri & Najm Al-Din, 2022, p. 63).

Based on this, the success of social studies teachers in their teaching performance and in achieving educational-learning goals is closely tied to their ability to utilize digital technologies and

their possession of digital teaching skills, which are reflected in their capacity to plan, execute, and assess lessons digitally, as well as their ability to overcome digital challenges encountered when using advanced technologies. Despite the importance of mastering digital teaching skills, some previous studies indicate a weakness in this area. For instance, Kamal (2022) found that the level of digital learning skills among social studies teachers is weak, and Mohammad (2024) reported that the digital teaching skills of social studies teachers are very weak. In contrast, other studies, such as those by Jabouri (2021) and Alloush (2024), revealed a moderate level of possession and availability of digital competencies.

Yami (2020), in her study, noted that the reality of teachers' possession of digital teaching skills in general education institutions is moderate and emphasized that teachers' training needs in digital teaching skills, from their perspective, were very high. Consequently, many studies recommend developing training programs to empower teachers with digital teaching skills. For instance, a study by Beloushi *et al.* (2024) recommends implementing training programs that meet teachers' needs in using digital teaching applications to continue leveraging technology.

Although the importance of digital teaching skills is widely acknowledged, previous research presents conflicting findings regarding teachers' actual competencies. Some studies report that social studies teachers possess weak digital skills (Kamal, 2022; Mohammad, 2024), while others indicate moderate levels of proficiency (Jabouri, 2021; Alloush, 2024). These discrepancies suggest that the current landscape is not fully understood and highlight the need for further investigation. By examining both the degree of digital skill possession and the potential impact of professional experience, this study aims to clarify these inconsistencies and provide evidence-based guidance for professional development programs.

Context and Rationale for the Study: In today's rapidly evolving digital era, technology is no longer an optional tool in education—it has become a central component of effective teaching and learning. The COVID-19 pandemic accelerated this transition, highlighting the urgent need for teachers to develop digital teaching skills. These skills allow educators not only to deliver content efficiently but also to foster critical thinking, creativity, and active engagement among students. Social studies teachers, in particular, play a pivotal role in nurturing learners' social, cultural, and civic competencies. Equipping them with strong digital competencies ensures that students can navigate contemporary societal challenges while gaining meaningful, technology-enhanced learning experiences.

Given the importance of social studies teachers' acquisition of digital teaching skills and their impact on improving teaching performance, achieving subject objectives, and enhancing students' academic levels and efficiency, this study aims to explore the degree to which social studies teachers in Jordan possess these skills and seeks to answer the following questions:

2. Questions of the Study

The research questions stem directly from this observed gap in the literature: what is the level of digital teaching skills among social studies teachers in Jordan, and does professional experience influence these skills? Addressing these questions is essential for understanding whether training needs vary across experience levels or if broad, systemic interventions are necessary. The study's hypothesis—that no statistically significant differences exist based on professional experience—offers a practical lens to examine this assumption and to inform targeted strategies for enhancing digital teaching competencies.

The First Question: What is the degree to which social studies teachers in Jordan possess digital teaching skills?

The Second Question: Are there statistically significant differences at the significance level ($\alpha = 0.05$) between the average responses of social studies teachers in Jordan regarding their possession of digital teaching skills attributable to the variable of professional experience?

3. Study Hypotheses

There are no statistically significant differences at the significance level ($\alpha = 0.05$) between the average responses of social studies teachers in Jordan regarding their possession of digital teaching skills attributable to the variable of professional experience.

4. Study Objectives

This study aims to achieve the following objectives:

1. Identify the degree to which social studies teachers in Jordan possess digital teaching skills.
2. Determine whether there are statistically significant differences in the degree of social studies teachers' possession of digital teaching skills in Jordan based on the variable of professional experience.

5. Importance of the Study

The study's significance lies in addressing the degree to which social studies teachers in Jordan possess digital teaching skills. Its importance can be categorized into theoretical and practical aspects:

5.1. Theoretical Importance

- This study will contribute to understanding digital teaching skills and their effectiveness in modern digital teaching practices, enhancing teachers' and education stakeholders' awareness of the importance of these skills and their application.
- It will provide clear information and precise statistics on the extent to which social studies teachers possess these skills, thereby evaluating their proficiency and identifying potential gaps and challenges that limit their acquisition of such skills.
- The study will provide a valuable reference for future research and studies on the topic.

5.2. Practical Importance

- This study aims to enhance teachers' ability to acquire and apply digital skills in their teaching.
- It will help overcome fear and anxiety related to using digital teaching skills by providing a detailed and explanatory framework that facilitates their application, demonstrating the enjoyment of continuously employing them in the classroom.
- The study's outcomes will lead to more effective learning outputs, as teachers gain and utilize digital teaching skills.

Ultimately, this study contributes both theoretically and practically. Theoretically, it deepens our understanding of digital teaching skills within the context of social studies education and highlights areas where teachers may face challenges. Practically, it offers policymakers, teacher trainers, and school administrators valuable insights, guiding the design of professional development programs that empower teachers to confidently and effectively integrate digital tools into their classrooms. By emphasizing both the human and technological dimensions of teaching, the study aligns with contemporary educational needs and the realities of digital learning environments.

6. Operational Definitions of the Study Concepts

Digital Teaching Skills: These are the skills that social studies teachers in Jordan need to possess when using digital technologies in teaching. They encompass planning, implementing, and assessing lessons digitally. These skills are measured by the score obtained by social studies teachers—the sample participants—when responding to the items on the current study's tool.

Social Studies Teachers: In the context of this study, this term refers to teachers who officially practice teaching and teach social studies subjects in all their branches in Jordanian public schools, regardless of their gender or professional experience.

7. Literature Review

Several studies have addressed the topic of digital teaching skills. Below is a presentation of some studies that serve the objective of the current study, organized chronologically as follows:

Al-Harbi (2022) conducted a study aimed at understanding the perspectives of elementary school mathematics teachers on the extent to which they practice digital teaching skills and determining the effect of variables such as years of experience and academic degree on the responses of the study sample. The study sample consisted of 44 mathematics teachers. The researcher employed the descriptive survey method and used an electronic questionnaire directed at a random sample of mathematics teachers in Saudi Arabia. The results indicated a high level of practising digital teaching skills in elementary school mathematics instruction and revealed differences in the level of agreement based on years of experience, whereas no significant differences were found based on the academic degree of the study participants.

Al-Jabr and Al-Ahmad (2023) conducted a study aimed at developing a list of digital teaching skills (planning, implementation, and assessment) and identifying these skills from the perspective of middle school science teachers. The sample consisted of 30 randomly selected middle school science teachers. To achieve the study's objective, the descriptive survey method was employed, and the researchers developed a questionnaire comprising 42 items, distributed across digital teaching skills (planning, implementation, and assessment). The study found that the participants' responses indicated a high level of proficiency in digital teaching skills, including planning, implementation, and assessment.

The study by Samara *et al.* (2023) aimed to investigate the degree of availability of professional digital skills among faculty members at the University of Hail. The study employed a descriptive approach, utilizing a questionnaire comprising 50 items across four axes. The study sample included 109 faculty members at the University of Hail during the 2022/2023 academic year, selected using stratified random sampling. The results indicated a very high degree of professional digital skills among faculty members, both overall and within each axis. The results also revealed statistically significant differences in the degree of availability of professional digital skills in favour of those who had attended four or more digital training courses. In contrast, no significant differences were attributed to the college or teaching experience variables.

Al-Buqmi and Al-Salem (2024) conducted a study aimed at understanding the reality of academic qualification for using digital skills among high school teachers in light of the digital transformation to achieve Vision 2030 from their perspective, as well as identifying statistically significant differences based on variables such as years of experience, scientific specialization, and academic qualification. The researchers employed the survey method with a sample of 361 teachers, selected using stratified random sampling. The study instrument was a questionnaire. The results indicated that the reality of using digital skills was at a moderate level, and there were no statistically significant differences between the averages of participants' responses regarding the overall degree of digital skills usage, based on years of experience, scientific specialization, or academic qualification variables.

Mohammad (2024) aimed to determine the degree to which social studies teachers possess digital teaching skills and their attitudes toward them in the digital age. The researcher employed a descriptive analytical method and prepared a questionnaire divided into two sections. The sample, selected randomly, consisted of 35 elementary school social studies teachers. The results showed that the digital teaching skills of social studies teachers were very weak.

Concluding Remarks:

From the review of previous studies, it became evident that:

- Most studies aimed to determine the level of possession and practice of digital teaching skills, as seen in the works by Mohammad (2024) and Al-Harbi (2022).
- Studies by Al-Jabr and Al-Ahmad (2023), Al-Harbi (2022), and Al-Buqmi and Al-Salem (2024) employed the descriptive survey method, whereas Mohammad (2024) used the descriptive-analytical method. The study by Samara *et al.* (2023) employed a descriptive approach, which is the method used in the current study.
- Most of the previous studies relied on the questionnaire tool, similar to the current study.
- The previous studies varied in their samples and sampling methods. The study by Al-Jabr and Al-Ahmad (2023) involved a randomly selected sample of middle school science teachers. Samara *et al.* (2023) focused on a stratified random sample of faculty members at the University of Hail. Al-Harbi (2022) used a random sample of mathematics teachers in Saudi Arabia, while Al-Buqmi and Al-Salem (2024) involved a stratified random sample of high school teachers. Mohammad (2024) employed a random sample of elementary social studies teachers. In contrast, the current study focuses on a simple random sample of social studies teachers.

There were variations in the findings of previous studies.

Utilization of Previous Studies:

- The current study benefited from previous studies in constructing its research problem.
- The current study drew on the methodological steps of previous studies.
- Previous studies helped in interpreting and discussing the findings of the current study.
- Distinctions of the Current Study Compared to Previous Studies:
 - Unlike previous studies, the current study focuses on assessing the level of digital teaching skills among social studies teachers in Jordan.
 - This study is unique in that it involves a sample of social studies teachers in Jordan.
 - The study also developed a questionnaire tool tailored to the characteristics of social studies teachers in Jordan for data collection.

A thematic review of previous studies reveals three main trends: first, research has primarily focused on measuring teachers' possession and practice of digital teaching skills across various subjects and educational levels, often using descriptive surveys and questionnaires (Al-Harbi, 2022; Al-Jabr & Al-Ahmad, 2023; Samara *et al.*, 2023; Mohammad, 2024). Second, findings are inconsistent, with some studies reporting high or very high levels of digital skills, while others, especially in the context of social studies, indicate moderate to weak levels (Mohammad, 2024; Al-Buqmi & Al-Salem, 2024). Third, most studies were conducted outside Jordan or in subjects other than social studies, highlighting gaps in localized and subject-specific evidence.

The current study addresses these gaps by assessing the degree of digital teaching skills among social studies teachers in Jordan using a questionnaire specifically tailored to this population. This

approach not only provides context-specific insights but also clarifies inconsistencies in previous research. By focusing on social studies, the study offers a unique contribution, informing both practical interventions, such as professional development programs, and theoretical understanding of digital teaching skills in contemporary education.

8. Methodological Procedures of the Study

8.1. Study Method

The current study adopted the descriptive method as it is suitable for this type of research, which aims to assess the level of digital teaching skills among social studies teachers in Jordan, describing the phenomenon as it exists in reality and answering its questions with relevant explanations.

8.2. Study Limits

Temporal Limits: The study was conducted during the first semester of 2024.

Spatial Limits: The study was carried out in schools in the Hashemite Kingdom of Jordan.

Human Limits: The study sample consisted of 100 male and female social studies teachers in Jordan.

Subject Limits: The focus was on the level of digital teaching skills among social studies teachers in Jordan.

8.3. Population and Sample of the Study

The study population consisted of all social studies teachers in public schools in Jordan during the 2024-2025 academic year. The sample included 100 male and female social studies teachers selected through simple random sampling. The table below illustrates the distribution of the study sample based on professional experience.

Simple random sampling was employed to ensure that every social studies teacher in the population had an equal chance of selection, thereby minimizing selection bias and enhancing the representativeness of the sample. Alternative methods, such as stratified or convenience sampling, were considered; however, simple random sampling was deemed the most suitable approach for achieving unbiased and generalizable results given the study's objectives and available resources.

Table 1. Distribution of the Sample by Professional Experience

Category	Number of Individuals	Percentage %
Less than 5 years	26	26%
5-10 years	44	44%
More than 10 years	30	30%
Total	100	100%

Table 1 illustrates the distribution of the study sample based on the professional experience variable. It shows that 26% of the sample, or 26 individuals, have less than 5 years of experience. Those with 5 to 10 years of experience make up 44% of the sample, with a total of 44 individuals, while 30% of the sample, totalling 30 individuals, have more than 10 years of professional experience.

8.4. Ethical Considerations

This study was conducted in accordance with standard ethical guidelines for research involving human participants. All procedures fully complied with institutional and national regulations

governing research ethics. Prior to participation, teachers were clearly informed about the study's objectives, procedures, and the voluntary nature of their participation. Informed consent was obtained from all participants, and confidentiality was strictly maintained, with all data anonymized to protect personal information.

8.5. Study Tool

The current study utilized a questionnaire to collect data from the field. This questionnaire was developed after reviewing several previous studies, including those by Al-Jabr and Al-Ahmad (2023), Al-Harbi (2022), and Al-Shammari and Al-Shammari (2020).

The questionnaire for this study consisted of two sections. The first section gathered personal data about the study participants (gender, educational qualification, and professional experience). The second section contained 30 positive statements distributed across three dimensions: digital lesson planning, digital lesson implementation, and digital lesson evaluation. The statements were designed to suit the nature of the study sample.

8.5.1. Questionnaire Scoring Method

To respond to the statements on digital teaching skills, a three-point Likert scale was used, as illustrated in the table below:

Table 2. Scoring Method for the Digital Teaching Skills Questionnaire

Substitutions	High	Average	Low
Degrees	3	2	1

8.5.2. Psychometric Properties of the Questionnaire

Reliability of the Questionnaire

The Cronbach's Alpha reliability coefficient was calculated using the Statistical Package for the Social Sciences (SPSS) after applying the questionnaire to a pilot sample of 30 social studies teachers in Jordan (outside the main study sample). The results are shown in Table 3:

Table 3. Cronbach's Alpha Reliability Coefficient for Digital Teaching Skills Questionnaire

Questionnaire for Digital Teaching Skills	Number of Items	Cronbach's Alpha Coefficient Value
Digital Teaching Skills Questionnaire	30	0.972

Table 3 shows that the Cronbach's Alpha reliability coefficient for the digital teaching skills questionnaire is 0.972, indicating a high level of reliability for the current study tool.

Validity of the Questionnaire

Internal Consistency Validity:

To verify the internal consistency validity of the digital teaching skills questionnaire, the correlation between the questionnaire items and the overall questionnaire score was calculated using SPSS after administering it to a pilot sample of 30 social studies teachers in Jordan (outside the main study sample). The results are presented in Table 4.

Table 4. Pearson Correlation Coefficient between the Items of the Digital Teaching Skills Questionnaire and the Total Score

Items	Pearson Correlation Coefficient	Significance Value (Sig)	Significance Level
1	**0.491	0.006	0.01significant
2	**0.614	0.000	0.01significant
3	**0.579	0.001	0.01significant
4	**0.692	0.000	0.01significant
5	**0.704	0.000	0.01significant
6	**0.784	0.000	0.01significant
7	**0.794	0.000	0.01significant
8	**0.742	0.000	0.01significant
9	**0.857	0.000	0.01significant
10	**0.763	0.000	0.01significant
11	**0.820	0.000	0.01significant
12	**0.565	0.001	0.01signifiant
13	**0.840	0.000	0.01significant
14	**0.790	0.000	0.01significant
15	**0.855	0.000	0.01significant
16	**0.621	0.000	0.01significant
17	**0.745	0.000	0.01significant
18	**0.799	0.000	0.01significant
19	**0.708	0.000	0.01significant
20	**0.790	0.000	0.01significant
21	**0.779	0.000	0.01significant
22	**0.816	0.000	0.01significant
23	**0.654	0.000	0.01significant
24	**0.821	0.000	0.01significant
25	**0.748	0.000	0.01signifiant
26	**0.817	0.000	0.01signifiant
27	**0.833	0.000	0.01significant

Items	Pearson Correlation Coefficient	Significance Value (Sig)	Significance Level
28	**0.760	0.000	0.01significant
29	**0.706	0.000	0.01significant
30	**0.785	0.000	0.01significant

The data presented in Table 4 shows a correlation between each statement and the total score of the questionnaire at a significance level of ($\alpha = 0.01$), indicating that the questionnaire is valid for its intended purpose.

Discriminative Validity:

The discriminative validity of the Digital Teaching Skills Questionnaire was calculated after it was applied to a pilot sample of 30 individuals. This was done by computing the "t" value between the mean scores of the lower-scoring and higher-scoring individuals in the sample, following a ranking of scores in ascending order and selecting the top and bottom thirds of the distribution, as shown in the following table:

Table 5. Discriminative Validity of the Digital Teaching Skills Questionnaire

Degree	Number of Individuals In the two groups	Means	Standard deviation	the computed "t" value	degree of freedom	the significance value Sig	the significance value
Low Degrees	10	48,000	1,519	-9.547	18	0,000	0,05
High Degrees	10	83,200	5,28				

From Table 5, it is clear that the computed "t" value is -9.547 with a degree of freedom of 18. Since the significance value (Sig = 0.000) is less than the significance level ($\alpha = 0.05$), there are statistically significant differences between the mean scores of the lower-scoring and higher-scoring individuals. Thus, the questionnaire can effectively distinguish between high and low scores, confirming its validity for measuring its intended purpose.

8.6. Statistical Analysis Methods

To address the research questions, the following statistical methods were employed:

- Arithmetic means and standard deviations
- One-Way ANOVA

9. Results and Discussion

Presentation and Discussion of the First Question Results

The first question stated: "To what extent do social studies teachers in Jordan possess digital teaching skills?"

To answer this question, the researchers determined the category lengths based on the three-point Likert scale used for the questionnaire statements.

The values of the arithmetic means were categorized using the following formula:

• Category Length = (Maximum Value of Alternatives - Minimum Value of Alternatives) / Number of Levels

- Arithmetic mean (from 1 to 1.66) represents a low level
- Arithmetic mean (from 1.67 to 2.33) represents a medium level
- Arithmetic mean (from 2.34 to 3) represents a high level

Accordingly, the arithmetic means and standard deviations for the study sample's responses to the Digital Teaching Skills Questionnaire were calculated, along with the overall standardized score of the questionnaire, as detailed in the following table.

Table 6. Arithmetic Means and Standard Deviations of the Responses of the Study Sample to the Digital Teaching Skills Questionnaire as a Whole

Digital Teaching Skills Questionnaire	M	S. D	Degree
	2.205	0,477	average

According to Table 6, the degree to which social studies teachers in Jordan possess digital teaching skills is moderate, with an arithmetic mean of 2.205 and a standard deviation of 0.477. This result may be attributed to the limited use of digital teaching skills by social studies teachers in classroom lessons or their reliance on using only one skill rather than other digital skills. It may also be due to their limited use of digital tools and technologies in planning, implementing, and assessing lessons and courses. Additionally, this could be attributed to the teachers' belief in the role of technology in education and their conviction about employing it in their profession, which indicates that they are inclined toward the necessity of acquiring digital teaching skills, especially after the availability of the necessary resources and facilities for this purpose.

This result may also be explained by the fact that most study participants still adhere to traditional teaching methods and have not kept pace with technological developments in education, which increasingly rely on digital skills. Moreover, it could be due to their weak skills in using modern technologies or their reliance on very basic tools, limiting their possession of the necessary digital teaching skills.

The result may also be due to social studies teachers in the study sample not receiving adequate training on the different digital teaching skills required for performing their teaching tasks, such as skills in digital planning, implementation, and assessment of lessons and courses. Furthermore, the scarcity of training programs aimed at developing these skills may contribute to this result. It could also be attributed to social studies teachers' fears about planning, implementing, and assessing lessons digitally, leading to a lack of motivation to acquire such skills, or due to challenges they face when using digital teaching skills, which affects their proficiency in them.

This result may be attributed to the fact that despite the Jordanian Ministry's focus on training teachers in the digital skills needed for teaching, these programs are still relatively new and have not received sufficient support and attention. It could also be due to the lack of investment in the expertise of specialists in the field of computer science and educational technology, which led to the moderate level of their digital teaching skills.

Structural and contextual challenges within the Jordanian educational system may further explain these results. For instance, limited access to advanced digital infrastructure in schools, insufficient opportunities for continuous professional development, and a reliance on traditional teaching approaches may have collectively contributed to the moderate level of digital teaching skills reported. In addition, some teachers may demonstrate resistance to adopting technology due to lack

of confidence or fear of making errors in front of students, which has been highlighted in previous studies (e.g., Mohammad, 2024; Kamal, 2022). Furthermore, the absence of incentives or formal evaluation criteria linked to digital competencies could reduce teachers' motivation to fully integrate digital tools into their instructional practices.

Presentation and Discussion of Results for the Second Question

The second question was: "Are there statistically significant differences at the significance level of ($\alpha = 0.05$) between the mean responses of social studies teachers in Jordan regarding their digital teaching skills, attributable to the professional experience variable?"

To answer this question, arithmetic means and standard deviations were calculated, along with one-way ANOVA to analyze the differences in responses regarding the digital teaching skills questionnaire as a whole, based on the professional experience variable, as shown in the following tables.

Table 7. Arithmetic Means and Standard Deviations of the Study Sample's Responses to the Digital Teaching Skills Questionnaire as a Whole, Based on the Professional Experience Variable

	the professional experience variable	Number	M	S.D	Grade
The Total Degree of The Digital Teaching Skills Questionnaire	Less than 05 years	26	2.391	0.384	1
	Between 05 and 10 years	44	2.140	0.467	2
	More than 10 years	30	2.138	0,534	3
	Total	100	2,205	0,477	—

From Table 7, it is evident that there are slight apparent differences between the arithmetic means of the digital teaching skills of the study sample according to the professional experience variable.

To verify whether these differences are statistically significant, a one-way ANOVA was conducted, as shown in the following table:

Table 8. One-Way ANOVA Results for Statistical Significance of Differences in Digital Teaching Skills Based on the Professional Experience Variable

	The origin of the difference	Total	Freedom degree	The Means	the computed "F" value	the statistical significance value (Sig)	the significance level
The Total Degree of The Digital Teaching Skills Questionnaire	Among groups	1,212	2	0,606	2,749	0,069	0,05
	Out of groups	21,372	97	0,220			
	total	22,584	99	—			

From Table 8, it is clear that the computed "F" value for the Digital Teaching Skills Questionnaire is (2.749), and the statistical significance value (Sig) is (0.069), which is greater than the significance level ($\alpha = 0.05$). This indicates that the differences in digital teaching skills based on professional experience are not statistically significant at the significance level ($\alpha = 0.05$).

Therefore, it can be concluded that There are no statistically significant differences at the significance level ($\alpha = 0.05$) between the mean responses of social studies teachers in Jordan regarding their digital teaching skills attributable to the professional experience variable; thus, we accept the null hypothesis.

This result may be due to all study participants focusing on acquiring basic and essential digital skills to deliver lessons and teaching materials in the classroom, regardless of their professional experience. It may also be due to the awareness of the study sample about the importance and necessity for any teacher in the age of information technology to acquire and utilize digital teaching skills in their profession, whether their experience is vast or limited.

This result may also be due to social studies teachers receiving the necessary training in using and applying digital skills in teaching, especially during the COVID-19 pandemic, which required all teachers, regardless of their years of experience, to use educational technology to deliver curriculum content to learners. This led to the development of digital teaching skills, which continued after the pandemic. Therefore, the impact of professional experience on the possession of digital teaching skills among the sample was not evident.

This result may also be attributed to the limited number of training programs that teachers received or their insufficient training. Alternatively, it could be due to the fact that all study participants received the same training on digital teaching skills, resulting in no statistically significant differences between them. Furthermore, since they all share the same educational environment, work with the same student age groups, and rely on similar technological tools in teaching at the public schools they belong to, this may explain the lack of statistically significant differences based on professional experience.

The absence of statistically significant differences according to professional experience suggests that digital teaching skills are not necessarily a function of years in the profession, but rather a reflection of systemic exposure to training opportunities and the educational environment. During the COVID-19 pandemic, both novice and veteran teachers were compelled to adopt similar digital platforms and instructional strategies, which likely homogenized their skill levels regardless of teaching experience. This finding aligns with Samara *et al.* (2023) and Al-Buqmi & Al-Salem (2024), who also reported no significant differences based on experience. However, it contradicts Al-Harbi (2022), who found that more experienced teachers demonstrated higher levels of digital practice. The discrepancy could be attributed to contextual variations in professional development policies, resource allocation, and institutional support across different educational systems.

10. Recommendations and Suggestions

In light of the study's findings, it is recommended that specialized training courses be designed for social studies teachers to keep pace with the rapid developments in digital teaching. These programs should be based on a clear assessment of teachers' training needs and implemented under supportive conditions that enable teachers to acquire and apply the required skills effectively. It is also essential to leverage the expertise of technology specialists to enhance the educational process and foster a supportive school culture that encourages teachers to confidently integrate technology into their daily practice. Furthermore, providing a supportive digital learning environment in schools across Jordan will allow teachers to exercise and strengthen their digital competencies. Ultimately,

the social studies curriculum should be reconsidered and adapted to actively promote the application of digital teaching skills, ensuring alignment with the demands of contemporary education.

Building on the findings of this study, the researchers suggest that future research should expand the scope to include all public school teachers in Jordan, as well as teachers in different educational stages, in order to provide a broader picture of digital teaching skills across the educational system. It would also be valuable to examine additional variables beyond professional experience, such as gender, academic qualifications, training opportunities, or access to technological resources, to better understand the factors that influence teachers' levels of digital competence. Such studies would enrich the field by offering deeper insights and more comprehensive evidence to guide educational policy and professional development programs.

11. Conclusion

This study aimed to address two primary questions: the extent to which social studies teachers in Jordan possess digital teaching skills, and whether these skills vary according to the teachers' years of professional experience. The findings revealed that teachers' overall level of digital teaching skills is moderate, and that no significant differences exist between teachers with different levels of professional experience. These results carry several important implications. Theoretically, they confirm that digital competence is not solely a product of years of service but is influenced by broader systemic and contextual factors such as access to training, institutional support, and exposure to digital environments. Practically, the findings highlight an urgent need for targeted professional development programs that move beyond general training and focus specifically on equipping social studies teachers with digital planning, implementation, and evaluation skills. Such initiatives can empower teachers to integrate technology more effectively into their classrooms, ultimately enhancing student learning outcomes. In light of the rapid digital transformations shaping education worldwide, policymakers, school leaders, and teacher training institutions need to collaborate in building supportive structures that foster digital growth among teachers. Only through such concerted efforts can social studies education keep pace with technological change and better prepare students for the demands of the digital age.

12. Limitations of the Study

This study has certain limitations that should be acknowledged. First, the findings are limited to a sample of 100 social studies teachers working in Jordanian public schools, which may restrict the generalizability of the results to other contexts or subject areas. Second, the study relied on self-reported data collected through a questionnaire, which may be subject to bias in participants' responses. Third, only one variable—professional experience—was examined in relation to digital teaching skills; other factors, such as gender, academic qualifications, or access to professional development, were not explored. Finally, the study employed a descriptive design, which allows for identifying patterns but does not establish causal relationships. These limitations underscore the need for further research that incorporates larger and more diverse samples, employs multiple data collection tools, and examines additional variables to achieve a more comprehensive understanding of teachers' digital competencies.

Declarations

Author Contributions. Ahmad Zaki Ali AL-Zghoul contributed to the study conceptualization, literature review, and manuscript drafting. Zagah Selma participated in data collection and preliminary analysis. Abdelrahim Fathy Ismail oversaw the study design, statistical analysis, and manuscript revision. Ghada Nasr Elmorsy contributed to data interpretation and final editing of the manuscript. All authors have read and approved the final version of the manuscript.

Conflicts of Interest. The authors declare no conflicts of interest.

Ethical Approval. This study was conducted in accordance with ethical standards. Informed consent was obtained from all participants involved in the study.

Data Availability Statement. The data that support the findings of this study are available from the corresponding author upon reasonable request.

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