

Teachers' Perceptions of Social Media Usage for Knowledge Management and Professional Collaboration in Public Secondary Schools in Bayelsa State

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Abstract

The study assessed the perception of public secondary school teachers' usage of social media platforms for knowledge management and professional collaboration in Bayelsa State, Nigeria. Utilizing a descriptive survey design, it was guided by three research questions. The population was 6,893 teachers in 217 public secondary schools, with a sample of 432 teachers selected using stratified and simple random sampling techniques. Data were collected through a structured questionnaire which was developed, validated, and tested for reliability (Cronbach Alpha = 0.79). The data analysis was performed using mean and standard deviation to address the research questions. The results revealed that teachers generally perceive social media usage as a valuable significant tool which enhances collaborative, professional development, and knowledge sharing. Despite these benefits, it is being constrained by challenges such as unstable power supply, digital illiteracy, and insufficient financial support among others which limit teachers' social media engagement for knowledge management and professional collaboration. The study recommends enhancing digital literacy training for teachers, developing clear guidelines for social media usage, and integrating social media into professional development programmes to optimize its benefits while addressing associated challenges.

Keywords: Social media, knowledge management, professional collaboration, teachers' perceptions, public secondary schools

Introduction

The rapid advancement of digital technologies has reshaped various sectors, including education, where social media has emerged as a significant tool for facilitating knowledge management and professional collaboration. Social media platforms, such as Facebook, Twitter, and WhatsApp, provide educators with opportunities to engage in collaborative learning, share resources, and access a wealth of educational materials that were previously inaccessible or difficult to obtain (Aja-Okorie and Okoro, 2024; and Ojo, 2022). These platforms serve as spaces for both formal and informal professional development, allowing teachers to connect with peers, share best practices, and stay informed about the latest developments in their field. It is a vital component of modern educational practices, particularly in its ability to support knowledge management and foster innovation (Balliamanda, 2021).

In educational institutions such as secondary schools, knowledge management refers to an art of inventing, connecting and development of information to improve teaching and learning (Kayode, 2021). Social media platforms facilitate this process by offering teachers a means to collaboratively develop and disseminate knowledge across diverse educational contexts (Sankale, 2022). Teachers are now able to harness the power of social media to share lesson plans, instructional videos, research findings, and teaching strategies with colleagues across geographical boundaries, thereby enriching the knowledge base within their institutions. This is corroborated by Aja-Okorie and Okoro, (2024). who argue that social media facilitates collaborative professional training of educators with experts and peers worldwide. Assessing teachers' views on how social media supports these aspects will shed light on the extent to which these platforms contribute to the advancement of educational practices and collaborative learning.

This suggests that understanding teachers' perceptions of how social media contributes to knowledge management is essential for leveraging these tools effectively within educational institutions. In addition it play a significant role in supporting innovative teaching practices and fostering professional collaboration among educators by providing a space for teachers to exchange ideas and experiment with new pedagogical approaches (Balliamanda, 2021). This trend is especially relevant in regions like Bayelsa State, Nigeria, where educators face various challenges, including

limited access to traditional professional development opportunities (Idigieneni, 2022). Social media, thus, provides a flexible and cost-effective alternative for educators to enhance their teaching practices and contribute to institutional innovation. There is limited understanding of how teachers in specific regions, such as Bayelsa State, Nigeria, perceive and make use of this social medium for instructional engagement purposes. Many teachers face challenges in accessing traditional professional development and collaborative opportunities due to geographical and infrastructural limitations, making social media an attractive alternative (Bere and Rambe, 2024). However, issues such as digital literacy, privacy concerns, and information overload can hinder the effective use of social media for educational purposes (Amadi, 2021).

Despite the growing recognition of the role of social media in enhancement of knowledge management and fostering professional collaboration in education, there remains a significant gap in understanding the specific perceptions of teachers regarding these platforms. While existing studies (Amponsah, 2022; Atuwokiki and Onyeukwu, 2025; Idigieneni, 2022) highlight the general benefits accrue to social media as knowledge sharing and collaboration, they often lack detailed insights into how teachers perceive these contributions within their unique educational contexts. Additionally, although research of Diете-Spiff; Anyaehie; Idenyenmhin and Idem (2023) discusses the potentials of social media to support innovative teaching practices and professional collaboration, it does not comprehensively address the specific challenges and benefits experienced by teachers, particularly in state like Bayelsa State. This study seek to fill these gaps by exploring teachers' perspectives on social media's role in knowledge management and professional collaboration, and by evaluating the practical challenges and benefits they encounter, providing a nuanced understanding that can inform more effective integration of social media into educational practices. By evaluating these benefits and challenges, the study sought to provide a full understanding on the practical implications of social media integration in education. This empirical insight is crucial for developing strategies that address these challenges while maximizing the main gains accrue to social media in the enhancement of educational outcomes. Without a clear understanding of these dynamics, it becomes difficult to develop strategies and policies that can maximize the benefits of social media in educational settings, particularly for fostering innovation and professional collaboration among teachers.

The Technology Acceptance Model (TAM), developed by Davis (1989), provides the theoretical foundation for this study. TAM posited that an individual's intentions to use a technology, as well as their actual usage behavior, are determined by perceptions of the technology's usefulness and ease of use. It is the most widely adopted framework for explaining user acceptance of new technologies. The theory further suggested that the adoption of a new technology depends on the user's attitude toward the technology, perceived ease of use, and perceived benefits derived from its utilization.

Employing this theoretical framework facilitates the investigation of teachers' use of social media tools for sharing scholarly knowledge. TAM is widely recognized as an effective framework for understanding the adoption and use of emerging technologies, particularly among secondary school teachers. According to TAM, individuals are more likely to adopt a technology if they perceive it as beneficial for improving performance or providing organizational advantages. Furthermore, if a technology is perceived as easy to implement, its adoption becomes more probable. This study applies TAM to examine the adoption of social media by teachers for knowledge sharing. It is therefore posited that teachers who recognize the benefits of social media tools and possess the necessary skills to use them effectively are more likely to accept and utilize these tools for sharing scholarly knowledge.

Social media platforms were initially designed for social interaction but have since developed into complex systems that facilitate a variety of activities, including educational applications. The incorporation of social media into educational contexts utilizes its interactive and user-generated content features to foster dynamic and engaging learning environments. Early research on social media in education examined its potential to transform traditional learning paradigms by introducing new forms of communication and content dissemination (Omi-Ujuanbi, 2025). With technological advancements, scholarly attention shifted toward exploring the integration of social media within both formal and informal educational settings to improve learning outcomes (Atuwokiki and Onyeukwu, 2025).

Research demonstrates that social media facilitates teachers' collaboration by offering accessible and flexible platforms for communication and group work. According to collaborative learning theories, knowledge is constructed through social interactions, which positions social media as an effective medium for these processes (Balliammanda, 2021). Social media platforms enable a range of

collaborative activities, including group projects and peer feedback sessions. Tools such as shared documents, discussion threads, and live video chats allow students to collaborate in real time, regardless of their physical location.

Social media supports knowledge sharing by enabling the dissemination of information beyond traditional classroom settings. Platforms such as YouTube and LinkedIn provide extensive repositories of educational content and facilitate professional networking and knowledge exchange (Sankale, 2022). Sharing resources, insights, and experiences in public or semi-public forums fosters a culture of continuous learning and professional development. Furthermore, social media allows educators to reach wider audiences, distributing research findings and educational materials to a global community (Ejoh and Lawan 2022).

Aja-Okorie and Okoro, (2024) identified several barriers that teachers encounter when using social media tools, including lack of trust, inadequate communication skills, insufficient management support, and technological challenges. Similarly, Asanga, Ukhurebor, Afolorunso, and Hussaini (2023) identified privacy as a significant obstacle to the use of social networking in education. They further points out that the cost of airtime and data bundles, insufficient privacy protections may expose teachers to harmful text, audio, and video content.

In addition, Traxler and Dearden (2021) noted that the willingness of a user to share knowledge on social networks is influenced by the freshness of information in the network. That is, if the information on the social network is not up-to-date, there will be unsatisfied expectations of the value of information, and this will lower the willingness of such a user to share knowledge.

Statement of the Problem

Social media platforms usage in educational settings has been increasingly recognized for its potential to enhance knowledge management and dissemination. Research by Ebunu and Onyeike, (2021), Aja-Okorie and Okoro (2024) indicated that social media platforms act as digital repositories where teachers can access and share best practices, thereby improving their teaching strategies. However, the use of social media in education is not without challenges. Asanga, Ukhurebor, Afolorunso, and Hussaini (2023) discussed issues such as privacy concerns, digital literacy gaps, and the risk of information

overload, which can hinder the proper utilization of social media in public secondary schools. These challenges are particularly crucial to Bayelsa State, where technological infrastructure and digital skills may vary.

The problem of the study therefore, was to assess how public secondary school teachers in Bayelsa State utilized social media platforms for knowledge management and professional collaboration as well as identifying the specific challenges they encounter.

The main purpose of the study was to assess teachers' perceptions on social media usage for knowledge management and professional collaboration in public secondary schools in Bayelsa State, Nigeria.

Specifically, the study seeks to:

1. Explore the perceptions of public secondary school teachers' on the usage of social media platforms for management knowledge in Bayelsa State
2. Assess the perceptions of public secondary school teachers' on social media usage for fostering professional collaboration in Bayelsa State.
3. Identify the challenges teachers of public secondary schools encounter in the usage of social media for knowledge management and professional collaboration in Bayelsa State

Research Questions

The following research questions guide the study:

1. What are the perceptions of public secondary school teachers on the usage of social media platforms for knowledge management in Bayelsa State?
2. What are the perceptions of public secondary school teachers on the usage of social media platforms for fostering professional collaboration in Bayelsa State?
3. What are the challenges public secondary school teachers encounter in the usage of social media for knowledge management and professional collaboration in Bayelsa State?

Methodology

This study adopted a descriptive survey research design. The population of the study was six thousand, eight hundred and ninety-three (6893) teachers in the 217 public secondary schools in Bayelsa State as the 2024/25 academic session (*Post Primary School Board, Yenagoa, 2024*). A sample of 432 teachers from 15 schools formed the sample of the study. The respondents were drawn from the three senatorial districts in the state. Five (5) schools each was selected from each senatorial districts through the stratified random sampling and sampling random sampling techniques. The instrument for data collection was a structured questionnaire called “Social Media Usage in Knowledge Management and Professional Collaboration Questionnaire” developed by the researchers. It consists of two (2) sections, namely; Section A and B. Section A measured the demographic variables of the respondents, and Section B consisted of a 22-items on the variables of the study, structured on a 4-point rating scale of Very High Extent = 4, High Extent =3, Low Extent = 2 and Very Low Extent = 1. The content and face validity of the instrument was done by two experts in Measurement and Evaluation. Their corrections and suggestions resulted in the final draft used in the study. The split-half method was used to establish the reliability of the instrument through the Cronbach Alpha statistic which gave a coefficient of 0.79. The data was analyzed using mean and standard deviation for the research questions. A decision rule of 2.50 and above was interpreted as a high extent (majorly for research questions 3), while a mean score below was interpreted as a Low extent

Results

Research Question One: What are the perceptions of public secondary school teachers on the usage of social media platforms for knowledge management in Bayelsa State?

Table 1: Perceptions of public secondary school teachers on the usage of social media platforms for knowledge management

S/N	Statement	M	SD	Remark
1.	Social media platforms help me easily access and share educational resources with my colleagues	3.08	.851	A
2.	I find that social media tools enhance my ability to collaborate with other teachers on academic projects.	3.04	.746	A

3.	Social media platforms are effective in facilitating the dissemination of new teaching strategies within my institution.	3.04	.500	A
4.	Using social media allows me to stay updated on recent teaching developments trends in my field.	3.31	.538	A
5.	Social media provides valuable opportunities for professional development and learning from peers.	3.09	.480	A
6.	The use of social media helps in organizing and categorizing teaching materials and resources	3.23	.432	A
GRAND MEAN		3.28		A

Source: Fieldwork (2024)

Key: *M = Mean, SD = Standard Deviation, A=Agree

Table 1, presents the perceptions of public secondary school teachers on the usage of social media platforms for knowledge management in Bayelsa State. All statements received a mean above the cut-off point of 2.50, indicating a general agreement among teachers that the usage of social media platforms positively impacts knowledge management. Notably, that social media allows them to stay updated on recent teaching developments trends in their various fields. The grand mean of 3.28 reflects overall positive perceptions, which suggests that social media plays a significant role in enhancing collaboration, professional development, and knowledge sharing among public secondary school teachers in Bayelsa State, Nigeria.

Research Question Two: What are the perceptions of public secondary school teachers on the usage of social media platforms for fostering professional collaboration in Bayelsa State?

Table 2: Perception of public secondary school teachers on social media usage for fostering professional collaboration

S/N	Statement	M	SD	Remark
7	Social media platforms inspire me to explore and implement new teaching methods and ideas	2.62	.388	A
8	I utilize social media to share information with other educators for collaborative teaching projects and initiatives.	2.61	.897	A
9	Social media enables give me access to share innovative teaching resources and strategies with my colleagues.	2.84	1.52	A

10	I find that social media communities provide valuable support and feedback on my teaching practices.	2.73	.358	A
11	Social media tools facilitate the exchange of ideas and best practices among teachers in my network.	2.90	.308	A
12	Social media platforms allow me to collaborate with educators from other institutions, enhancing my teaching practices.	3.07	.432	A
GRAND MEAN		2.87		A

Source: Fieldwork (2024)

Key: *M = Mean, SD = Standard Deviation, A=Agree

From table 2, all the statements have a mean above the cut-off point of 2.50. The teachers' views on social media usage for fostering professional collaboration revealed agreement among the teachers that social media positively influences these aspects, especially, allowing them to collaborate with teachers from other institutions which thus enhance their teaching practices. The grand mean was 2.87 which depict that teachers in Bayelsa State perceive social media as instrumental in encouraging innovation in teaching and facilitating professional collaboration with peers.

Research Question Three: What are the challenges public secondary school teachers encounter in the usage of social media for knowledge management and professional collaboration in Bayelsa State?

Table 2: Challenges teachers of public secondary school encounter in the usage of social media for knowledge management and professional collaboration

S/N	Statement	M	SD	Remark
13	Lack of internet connectivity	2.62	.38	A
14	Inadequate training	2.61	.89	A
15	Insufficient financial support	2.84	1.56	A
16	Resistance to accept the innovation	2.73	.35	A
17	Unstable power supply	2.90	.30	A
18	I face difficulties in managing the large volume of information and updates on social media platforms.	2.62	.38	A

19	Privacy concerns on social media platforms impact my willingness to share educational materials and ideas.	2.61	.89	A
20	Lack of digital literacy among some colleagues	2.84	1.52	A
21	The time required to manage social media interactions and updates detracts me from my teaching responsibilities.	2.73	.35	A
22	I experience challenges in distinguishing between reliable and unreliable information	2.62	.38	A
GRAND MEAN		2.57		A

Source: Fieldwork (2024)

Key: *M = Mean, SD = Standard Deviation, A=Agree

From the results presented in table 3, all the items were agreed by the teachers as the challenges encountered in the usage of social media for knowledge management and professional collaboration in Bayelsa State, Nigeria. Notably among them were: unstable power supply, digital illiteracy, and insufficient financial support. The grand mean of 2.57 indicates that the teachers perceive these challenges as major factors constraining knowledge management and professional collaboration.

Discussion

The results related to research question one indicates that social media usage plays a significant role in knowledge management among public secondary school teachers in Bayelsa State, Nigeria. This outcome supports the findings of Sankale, (2022), Ejoh and Lawan 2022) who asserted that social media platforms function as digital repositories, enabling teachers to access and share best practices and thereby enhance their teaching strategies.

The results for research question two demonstrate that teachers in Bayelsa State perceive social media usage as instrumental in facilitating professional collaboration with peers. This finding corroborates the perspective of Balliammanda, 2021) who argued that social media supports collaborative professional development by connecting educators with experts and peers globally.

The results for research question three indicate that teachers face various challenges in using social media for knowledge management and professional collaboration in Bayelsa State. Notable challenges include unstable power supply, digital illiteracy, and insufficient financial support. This finding aligns with the studies of Aja-Okorie and Okoro, (2024), Ukhurebor, Afolorunso, and Hussaini (2023) studies which identified barriers such as inadequate communication skills, insufficient management support, technological challenges including digital literacy gaps, and the risk of information overload, all of which hinder effective use of social media in educational settings.

Conclusion

The study concludes that social media platforms usage significantly enhanced collaboration, professional development, and knowledge sharing among teachers of public secondary schools in Bayelsa State. However, despite these benefits, they also face diverse challenges such as unstable power supply, digital illiteracy, and insufficient financial support among others which restrain them from meaningful social and instructional engagement for knowledge management and professional collaboration in a digitally connected world.

Recommendations

The following recommendations were made:

1. The post- primary education board in Bayelsa State should develop comprehensive digital training programs for teachers to enhance their computer literacy and effective usage of social media platforms for innovative teaching and professional collaboration.
2. School administrators and policymakers should establish formal mechanisms for integrating social media into professional development and collaborative projects, encouraging teachers to share best practices and innovative teaching strategies while providing ongoing support to address challenges associated with its usage
3. Substantial funding of secondary education by the state government to address basic amenities such as the electricity issue in schools.

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