

Impact of Social Media-Based Learning on Students' Engagement and Curriculum Delivery in Tertiary Institutions in Nigeria

Dr. (Mrs). Patience Omavuotu Chiazor

patience.chiazor@unidel.edu.ng

Department of Educational Foundations, University of Delta, Agbor, Nigeria
+2348033462690

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Abstract

This study examined the impact of social media-based learning on students' engagement and curriculum delivery in tertiary institutions in Delta State, Nigeria. A descriptive survey research design was adopted, involving students and lecturers from nine selected tertiary institutions in the state. Using stratified and simple random sampling techniques, a sample of 300 students and 50 lecturers was selected, with the student sample distributed across the institutions to ensure adequate representation. Data were collected using a validated structured instrument titled Social Media Learning and Curriculum Delivery Questionnaire (SMLCDQ), which measured the extent of social media use, students' engagement, and curriculum delivery. The instrument was subjected to face and content validation by experts in curriculum studies and educational technology, while its reliability was established through a pilot test using the Cronbach Alpha method, yielding a reliability coefficient of 0.70. Descriptive statistics (mean and standard deviation) were used to answer the research questions, while inferential statistics, including Pearson correlation and regression analysis, were employed to test the hypotheses at the 0.05 level of significance. Findings revealed that social media platforms are moderately to highly utilized for curriculum delivery, with WhatsApp as the most frequently used platform. Social media significantly enhanced students' engagement ($r = 0.65$, $p < 0.05$) and positively influenced curriculum delivery, accounting for 42% of its variance. Challenges identified include poor internet access, distractions, limited digital skills, and technical difficulties. The study concludes that social media-based learning improves engagement and curriculum delivery if challenges are addressed.

Keywords: Social Media, Curriculum Delivery, Students' Engagement, Tertiary Education, Learning Technology.

Introduction

The rapid diffusion of digital technology has significantly transformed teaching and learning practices in tertiary education, creating opportunities for more interactive and flexible curriculum delivery. According to Perez, E., Manca, S., & Fernández-Pascual, R. (2023) Social media platforms such as WhatsApp, Facebook, YouTube, Telegram, and X (formerly Twitter) have evolved from simple communication tools into important components of learning technology, enabling the sharing of course materials, facilitating real-time discussions, and supporting collaboration between students and lecturers. As these technologies become more integrated into academic environments, questions remain about their overall effectiveness in enhancing instructional processes.

While many educators recognize the potential of social media to improve students' engagement, motivation, and access to learning resources, others express concerns over distractions, misinformation, and lack of structure. These contrasting perspectives underscore the need for systematic investigation into how social media-based learning influences learners' behavioural, emotional, and cognitive engagement, as well as how effectively it supports curriculum delivery in tertiary institutions. The Technology Acceptance Model (TAM) also highlights perceived usefulness and ease of use as important determinants of how students and lecturers adopt these tools for academic purposes (Dumpit, & Fernandez, 2017).

Existing empirical studies demonstrate that social media can strengthen both engagement and curriculum delivery when used purposefully. International evidence shows that platforms such as WhatsApp and YouTube promote participation, collaborative learning, and resource sharing outside traditional classroom settings (Rehm, Hasan, & Lee, 2023; Lottering, 2020). In Nigerian studies report similar outcomes, with social media supporting improved access to course materials and group interaction (Umoh, 2024; Adeosun & Akinwalere, 2025). However, these benefits are often constrained by challenges such as poor internet connectivity, high data costs, limited digital skills, and exposure to non-academic distractions. Overall, available evidence suggests that social media-based learning holds considerable potential for enhancing students' engagement and improving curriculum delivery in tertiary institutions. (Okonkwo, et al. 2025). For these benefits to be fully realized, institutions must address infrastructural limitations, strengthen digital literacy, and adopt deliberate instructional strategies that maximize the educational value of social media while minimizing its challenges.

Statement of the Problem

Social media platforms such as WhatsApp, Facebook, YouTube, Telegram, and X (formerly Twitter) offer interactive features that could enhance teaching and learning by improving student engagement, facilitating collaboration, and supporting curriculum delivery. Despite this potential, many lecturers in Nigerian tertiary institutions continue to rely heavily on traditional instructional methods, and the integration of social media into teaching remains inconsistent and unstructured. Even when social media is used for academic purposes, there is limited empirical evidence on its actual impact on students' behavioural, emotional, and cognitive engagement, as well as on the effectiveness of curriculum delivery. Existing studies often focus on either engagement or technology adoption, but few examine how social media-based learning influences both student engagement and curriculum delivery in Nigerian tertiary institutions. Challenges such as poor internet access, high data costs, limited digital literacy, and distractions further complicate its effectiveness. This knowledge gap hinders educators and policymakers from making informed decisions about integrating social media tools into teaching and learning. Therefore, this study investigates the impact of social media-based learning on students' engagement and curriculum delivery in Nigerian tertiary institutions.

Objective of the Study

The primary purpose of this study is to determine the impact of social media-based learning on students' engagement and curriculum delivery in tertiary institutions in Nigeria. Specifically, the study seeks to:

1. Examine the extent to which lecturers use social media platforms for curriculum delivery.
2. Determine how social media-based learning influences students' engagement during teaching and learning.
3. Identify the challenges associated with the use of social media for curriculum delivery.
4. Assess students' and lecturers' perceptions of the effectiveness of social media platforms in curriculum delivery.

Research Questions

1. To what extent do lecturers use social media platforms for curriculum delivery in tertiary institutions?
2. How does social media-based learning influence students' engagement in the learning process?

3. What challenges do lecturers and students encounter when using social media for curriculum delivery?
4. What are the perceptions of students and lecturers regarding the effectiveness of social media platforms in curriculum delivery?

Research Hypotheses

H₀₁: There is no significant relationship between the use of social media-based learning and students' engagement.

H₀₂: Social media use has no significant impact on curriculum delivery in tertiary institutions.

Methodology

This study adopted a descriptive survey research design to examine the impact of social media-based learning on students' engagement and curriculum delivery in tertiary institutions in Delta State, Nigeria. The population comprised students and lecturers from nine selected tertiary institutions in the state. A representative sample of 300 students and 50 lecturers was drawn using stratified and simple random sampling techniques, with the student sample proportionately distributed across the institutions to ensure adequate representation. Data were collected using a structured instrument titled Social Media Learning and Curriculum Delivery Questionnaire (SMLCDQ), which assessed the extent of social media use, students' engagement, and curriculum delivery. The questionnaire was subjected to face and content validation by three experts in curriculum studies and educational technology. Its reliability was established through a pilot test using the Cronbach Alpha method, yielding a reliability coefficient of 0.70, indicating acceptable internal consistency. Collected data were analyzed using descriptive statistics (mean and standard deviation) to answer the research questions. Inferential statistics, including Pearson correlation and regression analysis, were employed to test the hypotheses at the 0.05 significance level.

Results

Research Question 1

To what extent do lecturers and students use social media platforms for learning and curriculum delivery?

Table 1: Mean and Standard Deviation of the Extent of Social Media Use for Learning and Curriculum Delivery

Item Description	Mean (M)	SD	Interpretation
Q1 Use of WhatsApp	4.20	0.80	Mostly Agree
Q2 Sharing learning materials	4.00	0.90	Agree
Q3 Communication with students	3.80	1.00	Agree
Q4 Organizing group discussions	3.70	1.10	Agree
Q5 Encouraging discussions	3.90	0.90	Agree
Overall (Q1–Q5)	3.92	0.94	Agree

The results in Table 1 show that lecturers and students agree that social media platforms are widely used for learning and curriculum delivery (Grand Mean = 3.92). WhatsApp is the most frequently used platform (M = 4.20), while organizing group discussions recorded the lowest mean (M = 3.70). This indicates a generally high level of social media utilization.

Research Question 2

How does social media-based learning influence students' engagement in the learning process?

Table 2: Mean and Standard Deviation of Students' Engagement in Social Media-Based Learning

Item Description	Mean (M)	SD	Interpretation
Q6 Participation in academic activities	4.10	0.80	High
Q7 Understanding curriculum content	3.90	0.90	Moderate
Q8 Timely submission of assignments	3.80	1.00	Moderate
Q9 Motivation to learn	4.00	0.90	High
Q10 Interaction with peers and lecturers	3.90	0.90	Moderate
Overall (Q6–Q10)	3.94	0.92	High Engagement

As shown in Table 2, students reported a high level of engagement associated with social media-based learning (M = 3.94, SD = 0.92). Participation and motivation recorded particularly high mean scores, while understanding of content and interaction were rated moderate to high. These findings suggest that social media positively enhances students' behavioural, emotional, and cognitive engagement

H01: There is no significant relationship between the use of social media-based learning and students' engagement.

Table 3: Pearson Product Moment Correlation between Social Media-Based Learning and Students' Engagement

Variables	N	r-value	p-value	Decision
Social Media Use & Students' Engagement	350	0.65	0.000	Significant

The result in Table 3 shows that there is a strong positive relationship between social media-based learning and students' engagement ($r = 0.65$, $N = 350$, $p < 0.05$). Since the p-value (0.000) is less than the 0.05 level of significance, the null hypothesis is rejected.

This implies that social media-based learning has a significant positive influence on students' engagement in tertiary institutions.

Research Question 3

What challenges do lecturers and students encounter when using social media for curriculum delivery?

Table 4: Mean and Standard Deviation of Challenges Associated with Social Media Use for Curriculum Delivery

Item Description	Mean (M)	SD	Interpretation
Q16 Lack of internet access	4.10	0.80	High Challenge
Q17 Lack of digital skills	3.90	0.90	Moderate Challenge
Q18 Distractions on social media	4.00	0.90	High Challenge
Q19 Technical issues	3.80	1.00	Moderate Challenge
Q20 Over-reliance on social media	3.70	1.00	Moderate Challenge
Overall (Q16–Q20)	3.90	0.93	Moderate–High Challenge

Table 4 shows that respondents face moderate to high challenges when using social media for curriculum delivery ($M = 3.90$, $SD = 0.93$). Lack of internet access and distractions were identified as the most significant barriers. Limited digital skills and technical issues were also reported as notable constraints. These findings suggest that infrastructural and behavioural factors may hinder the optimal effectiveness of social media-based learning.

Research Question 4

What are the perceptions of students and lecturers regarding the effectiveness of social media platforms in curriculum delivery?

Table 5: Mean and Standard Deviation of Perceived Effectiveness of Social Media in Curriculum Delivery

Item Description	Mean (M)	SD	Interpretation
Q11 Facilitates curriculum delivery	3.80	0.90	Agree
Q12 Achieves curriculum objectives	3.70	1.00	Agree
Q13 Provides timely feedback	3.90	0.90	Agree
Q14 Enhances teaching quality	3.80	0.90	Agree
Q15 Improves overall performance	3.70	1.00	Agree
Overall (Q11–Q15)	3.78	0.94	Moderate–High Effectiveness

Table 5 indicates that respondents perceive social media as moderately to highly effective in supporting curriculum delivery (M = 3.78, SD = 0.94). Timely feedback and facilitation of lessons were particularly emphasized. These results suggest positive perceptions of social media as a supportive instructional tool.

Note: N = 350, p < .001

H₀₂: Social media use has no significant impact on curriculum delivery in tertiary institutions.

Table 6: Regression Analysis of the Effect of Social Media Use on Curriculum Delivery

Model R	R ²	Adjusted R ²	F	p-value	Decision	
1	0.65	0.42	0.41	250.50	0.000	Significant

The regression results in Table 6 indicate that social media use positively and significantly predicts curriculum delivery in tertiary institutions. The R-value (0.65) indicates a moderate to strong positive relationship between social media use and curriculum delivery. The R² value of 0.42 shows that 42% of the variance in curriculum delivery is explained by social media use. The model is statistically significant (F = 250.50, p < 0.05), so the null hypothesis (H₀₂: Social media use has no significant impact on curriculum delivery) is rejected. This finding suggests that integrating social media platforms into teaching practices can meaningfully enhance curriculum delivery, although 58% of the variance is explained by other factors not captured in this study, such as institutional resources, pedagogical approaches, and lecturer competence.

Discussion of Findings

The study revealed that social media platforms are moderately to highly used by lecturers and students in Nigerian tertiary institutions, with WhatsApp emerging as the most frequently utilized tool (M = 4.20). Sharing learning materials (M = 4.00) and facilitating discussions (M = 3.90) were common

practices. This indicates that social media has become a central component of teaching and learning, enhancing communication and collaboration. These findings corroborate previous studies by Perez, Smith, & Wong (2023) and Alalwan (2022), who reported that WhatsApp and similar platforms are widely adopted in higher education to support learning, resource sharing, and interactive teaching. The high usage also suggests that lecturers and students recognize the convenience and immediacy of social media in delivering instructional content.

Students' engagement in social media-based learning was high (Grand Mean = 3.94, SD = 0.92). Specific engagement behaviors such as participation in academic activities (M = 4.10) and motivation to learn (M = 4.00) were particularly strong, while understanding curriculum content (M = 3.90) and interaction with peers and lecturers (M = 3.90) were moderate to high. The Pearson correlation analysis ($r = 0.65$, $p < 0.05$) confirmed a significant positive relationship between social media use and students' engagement, leading to the rejection of Hypothesis 1 (H_{01}). This implies that students who actively use social media for learning are more participative, motivated, and interactive. These results are consistent with Rehm, Hasan, & Lee (2023) and Umoh (2024), who found that social media platforms foster behavioral, cognitive, and emotional engagement in tertiary students. The findings also highlight the importance of integrating social media tools into teaching strategies to sustain student interest and active participation.

Despite its benefits, several challenges were identified. Poor internet access (M = 4.10) and distractions on social media (M = 4.00) were rated as high challenges, while lack of digital skills (M = 3.90), technical issues (M = 3.80), and over-reliance on social media (M = 3.70) were moderate. These barriers can hinder effective curriculum delivery and student engagement. The findings align with Alalwan (2022), who emphasized that infrastructural limitations and user competence remain major constraints in implementing social media-based learning. Therefore, the study suggests that institutional investment in reliable internet, technical support, and digital literacy training is crucial for maximizing the effectiveness of social media in teaching and learning.

Students and lecturers perceived social media as moderately to highly effective for curriculum delivery (Grand Mean = 3.78, SD = 0.94), particularly in providing timely feedback (M = 3.90) and facilitating lessons (M = 3.80). Regression analysis confirmed that social media use significantly predicts curriculum delivery effectiveness, explaining 42% of the variance ($R^2 = 0.42$, $F = 250.50$, $p < 0.001$). This led to the rejection of Hypothesis 2 (H_{02}). These findings demonstrate that integrating social media

into instructional practices improves lesson facilitation, feedback quality, and overall teaching effectiveness. This result is in line with Perez, Smith, & Wong (2023) and Umoh (2024), who reported similar positive impacts on curriculum delivery in tertiary institutions. However, the remaining 58% of unexplained variance indicates that factors such as lecturer competence, pedagogical methods, and institutional policies also influence curriculum effectiveness.

Conclusion

The findings of this study demonstrate that social media is a valuable tool in enhancing both student engagement and curriculum delivery in tertiary institutions. Students and lecturers actively use platforms like WhatsApp, Facebook, and YouTube to share materials, collaborate, and facilitate learning. The positive relationship between social media use and student engagement, along with its significant effect on curriculum delivery, underscores its potential as an effective educational technology. However, infrastructural challenges such as poor internet access, distractions, and limited digital literacy hinder optimal usage. Therefore, while social media-based learning has considerable benefits, its full potential can only be realized through deliberate planning, proper integration into teaching strategies, and support for both lecturers and students.

Recommendations

Based on the findings and conclusions, the study recommends the following:

1. Tertiary institutions should formally integrate social media platforms into curriculum delivery strategies to enhance engagement and learning outcomes.
2. Lecturers and students should be trained on effective and responsible use of social media for learning to maximize benefits and reduce distractions.
3. Institutions should provide reliable internet connectivity and technical support to mitigate barriers to social media use in learning.
4. Policies and guidelines should be developed to regulate the use of social media in academic settings, ensuring structured and purposeful engagement.
5. Future studies should explore the long-term effects of social media-based learning on academic performance and investigate its effectiveness across different disciplines.

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