

SOCIAL MEDIA USAGE AS A CATALYST FOR INCLUSIVE LEARNING AND ONLINE ENGAGEMENT

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Abstract

This study investigated the influence of social media usage on inclusive learning and online engagement among senior secondary school students in the Federal Capital Territory (FCT), Nigeria. A descriptive survey research design was adopted, and data were collected from 360 students using a structured questionnaire on social media usage, inclusive learning practices, and online engagement. Descriptive statistics and Analysis of Variance (ANOVA) were employed to analyse the data. With a weighted average of 2.69, the findings revealed a high level of social media usage, with most students using platforms such as WhatsApp, Facebook, Instagram, TikTok, and X/Twitter daily, primarily for social interaction rather than academic purposes. Inclusive learning indicators, such as fair treatment of students and the inclusion of learners with disabilities in regular classroom activities, were above average (2.90 weighted average), although the use of diverse digital and multimedia resources to cater to different learning needs was relatively low (40.9%). The results also showed that students' engagement in online learning platforms was above average (2.90 weighted average), with substantial participation in online class activities and online discussion groups. ANOVA results indicated that social media usage had a statistically significant effect on both inclusive learning and online engagement among the students (0.000 and 0.001 levels of significance, respectively). The study concludes that purposeful and pedagogically grounded integration of social media can enhance inclusive learning and foster higher levels of online engagement. It is therefore recommended that targeted teacher professional development, policy frameworks for responsible educational use of social media, and greater investment in digital and multimedia resources be implemented to optimise the pedagogical affordances of social media in secondary education.

Keywords: Social media, Inclusive learning, Online engagement, Synchronous learning, Asynchronous learning

Introduction

Over the past few years, rapid advancements in information and communication technologies (ICTs) have revolutionised emerging social media platforms such as Facebook, YouTube, Instagram, Snapchat, and Twitter, making social media an increasingly ubiquitous tool for human interaction using smartphones, tablets, and computers (Du & Wang, 2024; Mihret & Joshi, 2024). This phenomenon has permeated daily life worldwide, enabling content sharing and instant communication among diverse users, from the urban elite class to rural farmers. In Nigeria, despite infrastructural challenges, social media adoption is surging, particularly among youth, transforming socialisation, entertainment, and professional practices, including academia (Ejoh & Lawan, 2022). With over 4.9 billion global users as of 2025, platforms like WhatsApp, Instagram, TikTok, and YouTube foster microcredentials, real-time feedback, and synchronous/asynchronous

learning modes, particularly in resource-constrained settings (Statista, 2025). In Nigeria's Federal Capital Territory (FCT), where smartphone penetration exceeds 50% among youth, these platforms remove barriers posed by the traditional classroom setting, fostering a blended learning mode at different levels of education.

In educational settings, social media can support differentiated instruction, peer support networks, and affective engagement, particularly for learners who may be marginalised in traditional classrooms due to disability, socio-economic status, or linguistic background. These affordances align with broader digital inclusion agendas that seek to ensure equitable access to digital tools, skills, and meaningful usage opportunities for all learners (Domínguez, Mateu, Yébana, & Gómez, 2025). Grütter and Meyer (2014) and Schwab et al. (2021), as reported in a recent review on the impact of social media on educational inclusion, show that teacher networks and school, family communication mediated by social platforms can enhance responsive teaching and tailored support.

While social media fosters collaborative learning and cross-fertilisation of ideas, empowering users to share knowledge, join interest-based groups, and access educational resources like YouTube videos, it also poses challenges and risks to academic behaviours, especially among young learners (Patrick & Umaru, 2021; Saini & Mir, 2023). More importantly, many students face instructional challenges related to digital divides, uneven internet access, unethical use of social media platforms, low digital literacy, and information overload, leading to superficial online engagement rather than deep learning fostered by inclusive interactions.

In many resource-constrained regions in Sub-Saharan Africa, where internet ubiquity meets limited digital oversight, students mostly interact on these social media platforms largely unsupervised. This could alter the way students utilise these platforms for teaching and learning. The tension could widen digital inclusion gaps within the teaching-learning ecosystem. For instance, students from low-income settings could face unequal access and literacy, which could result in risky online behaviours, poor online engagement and issues related to inclusive learning. Inclusive learning and online engagement remain critical factors as students interact with social media platforms for various purposes, including learning and non-instructional engagements. Student engagement, a key predictor of academic success and retention, encompasses behavioural, emotional, and cognitive dimensions to learning (Domínguez, Mateu, Yébana, & Gómez, 2025). Recent studies highlight the positive impact of social media on student motivation and learning outcomes (Hannaway, 2024; Gitu & Basweti, 2025). Nonetheless, issues related to distractions, unethical usage of the platforms, poor engagement and the digital divide pose barriers to fair participation for many students, especially in the semi-urban areas (Bello, 2021; Mihret & Joshi, 2024).

This study bridges edtech research gaps by examining social media's dual impact on inclusive learning and online engagement in the Nigerian context, informing digital inclusion policies, especially in the senior secondary curriculum.

Statement of the Problem

The rapid advancements in social media platforms have transformed them into ubiquitous tools for interaction and learning, fostering collaborative knowledge sharing, interest-based groups, and access to educational resources. However, this surge introduces significant challenges to inclusive learning and online engagement among Nigerian youth, including digital divides, uneven internet access, and unsupervised interactions leading to distractions, unethical usage, and superficial engagement rather than deep, cognitively rich learning.

Previous studies have emphasised the instructional benefits of social media within the teaching-learning ecosystem. What remains unclear is the impact of social media usage on inclusive learning and online engagement. This study bridges edtech research gaps by examining social media's dual impact on inclusive learning and online engagement in the Nigerian context, informing digital inclusion policies, especially in the senior secondary curriculum.

Research Questions

1. What is the extent of social media usage among senior secondary school students in the FCT?
2. What is the extent of inclusive learning among senior secondary school students in the FCT?
3. What is the extent of online engagement among senior secondary school students in the FCT?

Hypotheses

1. There is no significant influence of social media usage on inclusive learning among senior secondary school students in the FCT
2. There is no significant influence of social media usage on online engagement among senior secondary school students in the FCT

Methodology

A descriptive survey research design was adopted for this study. This involved the collection of quantitative data with a questionnaire. The questionnaire measured items across inclusive learning and online engagement as critical variables in the study of social media usage among the senior secondary school students in the FCT.

The study targets Senior Secondary School II (SS2) students from public secondary schools across the six (6) Area Councils of the Federal Capital Territory (FCT), Abuja, including Government Secondary School Yaba, (Abaji), Government Secondary School, Jabi (AMAC), Government Secondary School, Dei-Dei (Bwari), Government Science Secondary School, Tunga Maje (Gwagwalada), Government Secondary School, Pegi (Kuje), Government Secondary School, Kwaita (Kwali), to ensure geographic representation amid Nigeria's urban-rural digital divides.

A Multi-stage sampling technique was employed for representativeness and feasibility:

Stage 1: Stratified sampling of Area Councils: One public senior secondary school was purposively selected from each of the six Area Councils based on accessibility and enrollment size (>500 students), giving a total of six schools.

Stage 2: Simple random sampling of students: Within each selected school, sixty (60) SS2 students were randomly chosen from class registers using a table of random numbers, stratified by gender (30 male, 30 female) to ensure balanced demographics. This resulted in a total sample size of 360 students across the 6 schools.

The main instrument for the study is a self-report survey titled the Social Media, Inclusive Learning, and Online Engagement Questionnaire (SMILOEQ) measured on a 4-point Likert scale: Strongly Agree, Agree, Disagree, and Strongly Disagree.

Section A: Demographics (4 items): Age, gender, device ownership, and social media self-efficacy. Section B: Social media usage (12 items), covers social media interaction, social media

ethics, and the like. Section C: Inclusive Learning (10 items) measures factors that promote inclusive learning among students. Section D: Online engagement (10 items): This section focuses on online interaction and engagement in an online learning environment.

To ensure that the instrument is consistent in measuring the identified variables, the questionnaire was administered to 25 students who were not part of the main sample size. The Cronbach α of 0.78 was obtained, indicating that the instrument was consistently reliable. For the data analysis, frequency counts and means were used for descriptive analysis, while the Analysis of Variance (ANOVA) was adopted to determine the impact of social media usage on inclusive learning and online engagement.

Results

Research Question 1: What is the extent of social media usage among senior secondary school students in the FCT?

Table 1: The extent of social media usage among senior secondary school students in the FCT
SA- Strongly Agree A- Agree D- Disagree SD- Strongly Disagree

S/N	Items	SA	A	D	SD	MEAN
1	I use social media platforms (WhatsApp, Facebook, Instagram, TikTok, X/Twitter) every day	81.7	10.2	6.4	1.7	3.23
2	I spend more than two hours per day on different social media platforms.	57.4	12.8	7.2	22.6	3.01
3	I usually use social media to chat with friends and family.	52.6	33.8	9.6	4.0	3.12
4	I use social media for educational purposes.	16.0	22.8	34.0	27.2	1.91
5	I belong to at least one subject-related group on social media.	20.7	27.2	35.3	16.8	2.31
6	I follow educational pages or channels on social media.	30.0	30.5	19.2	20.3	2.91
7	I only use social media for social engagements.	21.0	42.8	24.0	12.2	2.71
8	Social media sometimes distracts me from doing my homework or studying.	30.2	18.3	31.4	20.1	2.42
9	I feel confident using social media features such as posting and commenting for educational purposes.	40.2	18.3	21.4	20.1	2.72
10	My parents/teachers guide me to use social media responsibly.	25.2	18.3	31.4	25.1	1.92
11	Social media helps me feel more connected to my classmates and school.	47.4	17.8	12.2	22.6	3.00
12	In general, I believe social media could positively affect my learning.	47.4	22.8	12.2	17.6	3.02

The weighted Average is 2.69

Table 1 shows the extent of social media usage among senior secondary school students in the Federal Capital Territory (FCT). The overall weighted mean was 2.69, indicating a relatively high level of social media use. Most respondents (91.9%) reported daily use of popular platforms (WhatsApp, Facebook, Instagram, TikTok, and X [Twitter]). The primary purpose of use was

social: 86.4% used social media mainly for chatting with friends and family. In contrast, only 38.8% reported using social media for academic or learning-related activities. These results suggest that, although social media use is widespread among FCT senior secondary students, its application for educational purposes is limited. The finding highlights the need to realign educational policies and digital-learning frameworks to better leverage social media's pedagogical potential and promote more meaningful learning engagement at the senior secondary level.

Research Question 2: What is the extent of inclusive learning among senior secondary school students in the FCT?

Table 2: The extent of inclusive learning among senior secondary school students in the FCT
SA- Strongly Agree A- Agree D- Disagree SD- Strongly Disagree

S/N	Items	SA	A	D	SD	MEAN
1	I feel welcome and accepted in my school	64.0	20.2	14.8	1.0	3.24
2	My teachers treat all students fairly, regardless of background or ability.	21.0	73.1	3.8	2.0	3.18
3	My teachers use different teaching methods so that all students can understand the lesson.	31.7	27.2	25.3	15.8	2.62
4	Diverse learning resources, such as videos, animations, pictures, and others, are used in the classroom to teach.	23.7	17.2	32.3	26.2	1.98
5	Students with disabilities are included in regular class activities in my school.	41.0	28.5	20.2	10.3	3.01
6	My teachers consider students' diverse learning styles when teaching.	40.0	30.5	19.2	10.3	3.02
7	All students have equal access to learning resources (e.g. textbooks, laboratory resources and so on) in my class.	54.9	29.7	6.1	9.3	3.11
8	I am encouraged to share ideas and information with my classmates.	42.1	39.8	5.6	12.4	3.14
9	All students are given a chance to contribute and participate in discussions in my class.	40.2	18.3	21.4	20.1	2.72
10	My teachers and classmates do not discriminate against me based on my culture, language, or religion.	36.1	48.3	14.6	0.9	3.01

The weighted Average is 2.90

Table 2 presents findings on the extent of inclusive learning practices among senior secondary school students in the Federal Capital Territory (FCT). The overall weighted mean was 2.90, indicating an above-average level of inclusivity in classroom learning experiences. Most respondents (94.1%) reported that teachers treat all students equitably regardless of background or ability, and 69.5% indicated that students with disabilities actively participate in regular classroom activities. In contrast, only 40.9% of students reported that teachers integrate multimedia resources (e.g., videos, animations, images) into lessons. These results suggest that inclusive practices in FCT senior secondary classrooms emphasize equitable treatment and physical/participatory inclusion but fall short on pedagogical diversity and use of varied learning resources. The findings point to a need for professional development and policy initiatives that move beyond classroom management and spatial inclusion toward differentiated instruction and the integration of digital and multimedia resources to support diverse learning needs.

Research Question 3: What is the extent of online engagement among senior secondary school students in the FCT?

Table 3: The extent of online engagement among senior secondary school students in the FCT

SA- Strongly Agree A- Agree D- Disagree SD- Strongly Disagree

S/N	Items	SA (%)	A (%)	D (%)	SD (%)	MEAN
1	I regularly participate in online class activities.	29.2	40.8	19.2	10.8	3.10
2	I pay attention to learning during online lessons.	29.2	35.7	24.2	10.9	2.92
3	I share ideas with my classmates in online discussion groups.	28.2	40.7	20.2	10.9	3.01
4	During online classes, I submit my assignments before the deadline.	29.2	37.7	22.2	10.9	2.96
5	I look forward to my online lessons.	19.7	27.1	31.7	21.5	2.61
6	I am confident in participating in online lessons.	40.1	39.8	7.6	12.4	3.04
7	I watch educational videos within and outside the school environment.	39.1	39.0	9.6	12.4	3.05
8	I feel connected to my classmates when we interact through online groups or platforms.	39.1	39.8	5.6	15.4	3.14
9	I am confident in expressing my opinions in an online learning space.	30.2	37.7	22.2	11.9	2.96
10	Overall, I am actively involved in my learning when I use online tools and platforms.	39.6	37.0	11.1	12.4	3.01

The weighted average is 2.98

Table 3 summarises students' level of online engagement. The weighted mean score was 2.98, indicating above-average engagement with online learning platforms. In addition, 70.0% of respondents reported regular participation in online class activities, and 68.9% reported sharing ideas with peers via online discussion groups. These findings indicate increasing student engagement with online learning environments and growing familiarity with digital platforms for academic interaction. Pedagogical opportunities associated with online engagement should be more strategically harnessed to enrich instructional delivery and to foster active, collaborative learning at the senior secondary school level.

Hypothesis 1: There is no significant influence of social media usage on inclusive learning among senior secondary school students in the FCT

Table 4: ANOVA of the Influence of Social Media Usage on Inclusive Learning

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	22106.489	16	1225.472	111.551	.000
Within Groups	3770.775	341	11.559		
Total	25877.264	357			

An analysis of variance (ANOVA) was conducted to examine the effect of social media usage on inclusive learning among senior secondary school students in the Federal Capital Territory (FCT). At $p\text{-value} = 0.05$, the ANOVA indicated a statistically significant effect of social media usage on inclusive learning, $F(16, 341) = 111.551$, $p < .05$. The observed significance value ($p\text{-value}$, 0.000) is below the .05 threshold, indicating that differences in social media usage were associated with differences in mean inclusive learning scores. Since the $p\text{-value}$ is below .05, the null hypothesis is rejected. These results suggest that greater proficiency and purposeful use of social media platforms are associated with improved inclusive learning practices. Educators and policymakers should consider leveraging social media strategically to promote equitable participation and collaborative learning in senior secondary schools.

Hypothesis 2: There is no significant influence of social media usage on online engagement among senior secondary school students in the FCT

Table 5: ANOVA of the Impact of Social Media Usage on Online Engagement

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	13932.961	11	1266.089	36.818	.001
Within Groups	11417.989	338	34.396		
Total	25350.951	349			

Lastly, ANOVA was conducted to determine the effect of social media usage on the extent of online engagement among senior secondary school students in the Federal Capital Territory (FCT). At the 0.05 level of significance, social media usage had a statistically significant effect on online engagement, $F(11, 338) = 36.818$, $p < .05$. Since the $p\text{-value}$ of 0.001 is below .05, the null hypothesis is rejected. This finding suggests that improved proficiency in social media usage contributes positively to students' online engagement on learning platforms. As students develop improved skills and confidence in using social media responsibly, their participation in online learning environments is likely to increase. The result highlights the link between social media self-efficacy and digital engagement, supporting the integration of social media competencies into classroom practice.

Discussion of Findings

The findings revealed a high level of social media usage, yet students predominantly employ these platforms for social activities rather than academic purposes. This pattern aligns with prior research showing that students often prioritise social interaction, entertainment, and peer communication on social media, while the educational functions of these platforms remain underutilised (Azizi, Soroush, & Khatony, 2019). At the same time, the findings indicate that inclusive learning practices, particularly fairness in teacher–student interactions and the physical inclusion of students with disabilities, are above average. This is consistent with contemporary inclusive education frameworks, which emphasise equity, participation, and a supportive classroom climate as core dimensions of inclusion (Dyer, 2022; UNESCO, 2024). However, the relatively low use of diverse digital and multimedia resources to support different learning styles suggests that inclusion is still framed more around access than differentiated pedagogy. International guidelines on digital technologies for inclusion stress the importance of multimodal materials and flexible instructional design to meet the needs of diverse learners, including those with special needs (UNESCO, 2024). The findings further reveal that students' engagement in online learning platforms was above average, with many regularly participating in online class activities and discussion groups. This resonates with emerging evidence indicating that, when students exercise self-control, social media and online platforms can enhance engagement by providing additional channels for academic interaction and peer support within and outside the school environments. Studies on secondary school students similarly report that social media can function as an extension of the classroom, enabling collaboration, sharing of resources, and sustained communication beyond the school environment (Barbour, 2015).

The positive, significant effect of social media usage on inclusive learning found through ANOVA suggests that as students' social media interaction becomes more responsible and educationally oriented, they are more likely to find their voices and develop the confidence to participate actively in the teaching–learning process. This result corroborates Abuzar & Hussain (2024), who argue that when students are guided to use social media purposefully, these platforms can broaden opportunities for collaboration, expression, and participation in ways that are consistent with inclusive education goals. Building on hypothesis 2, the significant impact of social media usage on online engagement indicates that social media proficiency functions as a key enabler of students' willingness and capacity to participate in online learning environments (Du & Wang, 2024). From a connectivist perspective, social media and online platforms can be conceptualised as nodes within a wider learning network through which students create and navigate connections with people, information, and communities that support ongoing knowledge construction. In this light, the observed relationships between social media usage, inclusive learning, and online engagement highlight the need for educational policies and school-level strategies that intentionally embed social media literacy, digital citizenship, and structured online learning activities within the senior secondary curriculum. Overall, the findings suggest that merely having access to social media and online platforms is not sufficient; what matters is how these tools are pedagogically deployed to improve inclusion and engagement within the learning space. The significant associations between social media usage, inclusive learning, and online engagement also highlight the importance of embedding clear guidelines on ethical, responsible, and inclusive use of social media within school policies.

Conclusion

The study indicates that social media usage among senior secondary school students in the FCT is high, yet its educational potential remains only partially harnessed. While inclusive learning practices such as fair treatment of students and the physical inclusion of learners with disabilities are above average, the use of diverse digital and multimedia resources to support different learning needs is still limited. The findings further reveal that students' engagement in online learning platforms is above average, with substantial participation in online class activities and discussion groups. Importantly, social media usage shows a statistically significant positive effect on both inclusive learning and online engagement. Taken together, these results underscore the strategic role of social media and online platforms as catalysts for fostering equity, participation, and active learning at the senior secondary school level.

Recommendations

The following recommendations are made, based on the findings from the study:

- Ministries of Education, curriculum planners, and school administrators should formally integrate structured social media-based activities into the secondary school curriculum to promote responsible use of these platforms for educational purposes.
- Teachers should design tasks that require students to use social media for research, knowledge sharing, reflection, and collaborative problem-solving, thereby shifting usage from predominantly social to more academic and inclusive purposes.
- Regular capacity-building programmes should be organised to equip teachers with inclusive digital practices, such as content development for different learning styles, supporting learners with disabilities, and facilitating equitable participation in online spaces.
- Schools should implement programmes that build students' ethical and responsible use of social media and online platforms,

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