

**LEVERAGING SOCIAL MEDIA APPLICATIONS FOR EFFECTIVE
TEACHING AT THE JUNIOR SECONDARY SCHOOL LEVEL (JSS2)
IN CALABAR SOUTH LOCAL GOVERNMENT AREA, CROSS
RIVER STATE, NIGERIA**

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Abstract:

The study investigated the relationship between the usage of social media applications and teachers' performance in Calabar South Local Government Area of Cross River State. The survey research design was used to guide the study. A population of 887 teachers was involved in the study with a sample of 87 (being 10% of the population). The simple random sampling technique was used in selecting the sample. Two instruments were utilized to guide the study; Usage of Social Media Applications Questionnaire (USMAQ) and Teachers' Performance Rating Scale (TPRS) in Social Studies. Findings from the tested hypotheses revealed among other things that social media applications such as; Facebook, X (formerly Twitter) and WhatsApp correlates significantly with teachers' performance within the study area. It was recommended that; Schools should be encouraged to embrace the integration of social media applications into teaching and learning so as to enhance collaborations and fast instructional management processes. There is need to self-cultivate and self-regulate the use and learning of social media skills among teachers to balance their teaching skills and perform other academic as well as avoiding abuse. Future studies should at a broader, sample and study area for a more generalized conclusion

Keywords: pedagogy, social media applications, Teachers' performance

Introduction

The increasing widespread of social media networking in education is relatively new but with potential serious implications for teaching and learning and teacher education particularly in the 21st century. The main aim of this paper was to find the necessity for adapting social media network or applications in teaching and learning process. This is because the dynamisms in today's ever-changing world have prompted teachers with the opportunity to utilize these social media networking sites in the educational process to ease the burden of teaching and learning. Teaching methods that are learner- centered have evolved and build around the learners to explore thus leaving the teacher with the option of facilitation. It has helped the teacher to define the content of the curriculum and formulate its objectives in line with the students' desires and needs. It allows students send messages to a specific student or to a group of students through personal files. Social media sites can be exploited for the exchange of skills, ideas, values and information resources. With social networking, educational activities that measure students' talents and creative abilities can be generated. Social media resources make it possible for the increase of time allocated to students to enable them communicate regularly with their teachers on issues that concern their academics on interpersonal basis with the assurances of getting reliable feedback to boost their learning.

The Internet which is one of the backbones of social networking for instance can be used in many ways and patterns that overcome all limits and restrictions; it allows both teachers and learners to obtain information and publish them at any time and place, and it allows the user to communicate with remote individuals. The educational field was not far from these facts, as the internet became the main drive of modern trends pursued by ministries of education in various countries of the world. The educational process has witnessed accumulated and consecutive developments based on developments and changes in information and communication technologies and this change has brought innovations, new concepts and methods in the teaching and learning ecology (Veletsianos & Kimmons, 2013).

Rathore and Jain (2019) clarified that new types of web tools, called social media sites have appeared; they became a basic performance in the educational process as they presented advanced patterns of participation and interactivity. Social media can be used by distance education students to provide the needed courses and educational materials easily. The integration of social media in the educational field produces an effective impact on the academic life of students. At present, educational institutions and schools are seeking to employ internet technologies and social media in the educational process, as an attempt to enhance the skills of critical thinking, cooperation and knowledge-building (Boateng & Amankwaa, 2016).

The internet has placed the students in a prominent position, and has provided them with many ways and methods that enable them to communicate effectively with their colleagues

and teachers (Amenyedzi, et al., (2011)). That internet has also helped the teacher overcome many of the obstacles that he/she was facing in the educational process, and contributed to the establishment of links and effective relationships between the student and his/her teacher. The Internet has addressed many of the problems that hinder the progress of the educational process as required, such as the problem of resource inflation and students' inability to absorb the educational material during the class period.

This section of the chapter aims to clarify the educational methods by which social media can be used in education, and it also aims to clarify the pros and cons of social media in the educational process.

In other to make this study relevant, it is necessary to review the opinions of other researchers who have written something relating to this subject. In the opinion of Faizi et al. (2013), social media provides a large amount of educational information available on the Internet. The educational resources, references and information found on global platforms and websites represent a huge asset and wealth of educational information of interest to all learners and students around the world. The study of Faizi (2013) was aimed at identifying the level of influence of social media on students' speaking and reading skills and the level of their impact on students' motivation towards learning. The study was applied to eight public and private universities in Bangladesh, on a sample of 16 teachers and 160 students. The study found that the positive effects that social media have on students' skills in speaking and writing are more than the negative effects. These sites enable teachers to design group discussions that enable students to exchange and share ideas; thus, their communicative and interactive skills are improved. However, the study also demonstrated some negative effects of using social media on writing and speaking skills, including students' resort to short form of words, lack of interest in grammar, as well as inconsistent words and utterance

Awad (2014) conducted a study to identify the effects of using social media on the level of student achievement in Tulkarm. The study found that the use of social networking sites, like Facebook has a negative effect on students' academic achievement, especially if the number of hours used by these sites exceeds the acceptable limit. As for the positive use of social media sites, the study found a positive effect to using these sites on the educational process, especially if the students are under the guidance of their parents. The results of this study indicates that social media could have the lead in improving the quality of instruction in education. Additionally, Devi et al., (2019) conducted a study to identify the effects of social networking in education. The study was focused on Facebook and YouTube to identify the strong points that make these sites contribute to the educational process. The researchers designed a questionnaire to collect data and distributed same to a sample of 25 members of the teaching staff and 50 undergraduate students at Al-Qasim Green University. The result found multiple benefits provided by social media applications to the educational process

ranging from stimulating and expanding knowledge, developing students' and teachers' technical capabilities, taking into account individual differences among students, to its positive impact on students' academic achievement.

The role and effects of social media on teaching were investigated by several others and scholars and researchers. For instance, Ogbudu, Undie and Ogbiji, (2023) conducted a study to examine the relationship between internet use and decline in the academic performance of university students by designing a questionnaire for university students. The study found that the level of academic performance of the students was low, as this was attributed to the excessive use of the Internet; as unregulated use leads to a decline in the performance of university students. The study found that this uncontrolled use has negative consequences on students, such as staying up late at night, excessive absence, and lateness to lectures. The researchers recommended that it is essential to guide students to methods of proper use of the Internet. Azih, and Onyeyirichi (2023) carried out a study to identify the effects of using social media on the educational process for the elementary stage. The researcher relied on reviewing previous studies to achieve the objectives of the study. The study found that social media enjoy great importance in the lives of students nowadays, as it enhanced the levels of communication between students and teachers, and allowed teachers to present educational material in new ways that differ from traditional methods and contributed to enhancing their level of motivation towards education. These methods are based on creating private groups and accounts for students. The results also confirmed that the effective use of social media makes these platforms the best way to teach students at the elementary level as student's prior knowledge of how to use them is required.

Devi et al. (2019) conducted a study to investigate the effect of using social media networks in education on students' performance. The study found that social media became one of the most important means of communication between individuals. These networks enable students to exchange and share their knowledge with others through discussion panels that can be organized across groups and pages. Social media help to enhance the level of cooperation between teachers and students, and they stimulate their thinking skills. It also contributes to deepening the level of social bonds between members of the educational process, and thus improving the efficiency and quality of educational outcomes. Social media networking is one of the most popular media outlets in recent years. Despite its short modernity, the demand for it has doubled significantly; it has become a politically, economically and socially influential role. Experts in the field of education stressed that social media add a lot to the educational field, through participation and interaction in the educational process. These help to increase the desire of all concerned parties for education

Ansari and Khan (2020) argued that the importance of social media networks in the educational process is represented in the fact that there are a large number of educational perspectives who support the use of these networks in education, including cooperative

education theory, constructivism theory, learning on demand theory, student-centered education theory, active learning theory, and the theory of learning. The use of these networks improves education, enhances modern teaching methods, and creates an environment for education with the participation of members, both from inside and outside, and it strengthens students' relations with each other, supports scientific cooperation and teamwork. Social media sites cannot be considered merely virtual spaces aimed at forming new friendships and relationships, but rather, be considered a distinct educational tool if it is treated as an important source of information. Devi et al., 2019 stressed that it is necessary for educational institutions to encourage students to participate in social sites and develop their technical skills in dealing with the internet.

Additionally, Faizi et al., (2013) argued that 50 social media contribute to adding the social aspect to the educational process and enhancing the participation of various parties in this process; therefore, it is not limited to presenting the course to the student only, but rather making the student a main focus of the educational process. The authors emphasized that in the light of the increasing number of students in classrooms, the abundance of study materials, and the shortage of time available for discussion between students and teachers, these communication sites have become appropriate tool to enhance communication opportunities between students and teachers outside the educational institutions. These sites have succeeded in eliminating the educational institutions and sites have succeeded in eliminating the formalities present in educational institutions, thus have improved the skills of individual communication with. These communication skills would contribute to the development of the student's personality and appropriately prepare him/her to deal with the various situations that he/she may face in addition to dealing effectively with the various challenges of the age.

Again, Aduloju, (2020). indicated that nearly 90% of university education students spend most of their time on social networking sites; the use of these networks in education is constantly increasing. This emphasizes the importance of using social networks in the educational process as it provides good education through some useful ideas for researchers and academics. Moreover, these sites provide students with skills that they cannot acquire in the regular classroom, from which they can identify, list and inspect files, and share audio and video files. These sites provide students with the ability to create, edit, copy and download files, arrange image files, and the ability to enjoy strategic monitoring and rapid response. These sites enable students to learn according to individual pace and ability, educational level and circumstances.

Furthermore, social media sites also help easy exchange of scientific material among students. In addition, it helps teachers to provide immediate and direct educational guidance to his/her students outside the classroom; thus, it increases the student's sense of achievement

by helping him. One of the benefits of social media in the educational field is that the student can gain many experiences and social skills in addition to direct educational benefit. Studies have found that the use of this type of sites in the educational process would contribute to raising the levels of social growth in students, as dealing with these sites imposes on them how to deal and communicate with a larger segment of people (Faizi et al., 2013). Psychologists and socialists believe that the use of social communication in the educational process is an effective way to overcome the problems of introversion or chronic shyness. Social media can be used to improve teaching and learning through a number of ways, such as using educational programmes that are shared through social media, connecting with people who are specialized in specific topics and following them on social media, as well as searching for a specific topic within these sites. Faizi et al (2013) maintained that these sites can give the 52 learners the ability to build friendships and social relationships. In collaborating the above findings, it is the thinking of these researchers that teachers can use these sites to improve communication levels between them and students, and to present educational materials to students in modern methods that differ from traditional methods that do not take into account the individual differences of students. This means that the teacher can use these communication sites, e.g. Facebook, X and WhatsApp to employ new ideas that enhance the effectiveness of the educational process. Also, the teacher's role is represented in his/her ability to direct students' attention towards the use of these communication sites and their exploitation in areas that benefit them instead of being merely entertainment sites.

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2020), Distance education schools, are still facing many problems, foremost is that some teachers, parents and students are not prepared for these modernization and e-learning forms of education, and they lack the skills required to practice it, in addition to the lack of technical capabilities for some teachers and parents, especially equipment, computer, and high-speed internet that enable them achieve the desired results. Again, even as social media sites are considered as educational support tool for students, it may also generate negative effects in the educational process if abused. The list below highlights some of these disadvantages:

- i. There are privacy and security concerns.
- ii. Misunderstanding is sometimes due to lack of face-to-face confrontation.
- iii. Communication problems occur in case of overcrowding.
- iv. Students' time wasted by spending a long time on these sites because of the various services provided by these sites. This long time may expose students to psychological and social problems.
- v. Social media addiction as a result of the various features provided by these sites to students. The student's ability to freely express their opinion may attract them continuously to these sites as they find suitable opportunities to express their thoughts and feelings.

- vi. Social networking sites, including movies and entertainment sites, may become alternatives to reading and learning.
- vii. Social networking sites are only used for entertainment and communicative purposes with friends, while they have a limited use for educational purposes.
- viii. Negative influence on the morals of students as they browse websites that advocate pornography and immorality; may lead them to distance themselves from religious and moral values (Devi et al., 2019).

In general; Facebook, Twitter, WhatsApp, Snapchat, Instagram and YouTube are among the most prominent social media platforms at the present time. The study is basically delimited to cover; Facebook, X-app (formerly Twitter) and WhatsApp:

Teacher use of Facebook in teaching

Facebook (facebook.com): Facebook is one of the most prominent social networking sites. It is characterized by ease of use where anyone who is good at dealing with the internet can create his/her own account and use the various applications on it Aduloju, E. T. (2020). It was founded in 2004 by a Harvard student named "Mark Zuckerberg" who became one of the richest men in the world and the youngest billionaire in the world over. Facebook achieved great success as it was initially set up to provide services to university students, faculty, and employees, but later it expanded to contain large groups of people. The number of active Facebook users in 2011 reached nearly 800 million according to Aduloju, E. T. (2020). World figures proved, with the continuous increase in the acquisition of portable devices and personal computers that the popularity of the Facebook social network is increasing worldwide. Facebook user base expanded around the world and reached about 1.39 billion active users at the end of the fourth quarter of 2014. It also makes it possible to meet old friends and learn about their latest news and whereabouts. Facebook allows individuals to post special events and invite individuals where they can share happy times and occasions with them.

In a study by (Bicen and Uzunboylu 2013), teachers utilize Facebook in teaching and learning through communication, collaboration, instructional delivery, and professional development. Empirical studies have shown that Facebook supports interaction between teachers and students, enhances collaborative learning, and improves access to educational resources. The study also investigated how teachers used Facebook in blended and online learning environments. The researchers studied 71 teachers from primary and secondary schools and found that teachers used Facebook to share learning materials, cooperate with colleagues, and participate in online discussions. The study concluded that Facebook positively influenced teachers' perceptions of online learning and increased collaboration among educators.

Similarly, Sumuer, Esfer, and Yildirim (2014) carried out a multi-method study involving 616 K-12 teachers. Their findings revealed that Facebook had become part of teachers' daily professional activities. Teachers reported using the platform for sharing educational information, communicating with colleagues, and supporting professional development activities. However, the study also showed that teachers carefully managed privacy settings to maintain professional boundaries with students and parents. Similarly, Manca and Ranieri's studies on social media in education also demonstrated that teachers use Facebook groups to extend classroom interaction beyond school hours. Through discussion forums, announcements, and file sharing, teachers encouraged active student participation and collaborative learning experiences. Facebook groups allowed learners to ask questions, exchange ideas, and access instructional materials conveniently.

In another dimension, an empirical study by Rosenberg and Asterhan (2015) explored teacher-student interactions on Facebook among secondary school teachers. Using surveys and interviews, the researchers discovered that teachers used Facebook for instructional communication, psycho-pedagogical support, and relationship building with students. Teachers utilized features such as group chats, posts, and comments to guide students academically and emotionally. Again, In Malaysia, (Husin & Ali, 2022) examined teachers' perspectives on Facebook in teaching and learning. The study involved 80 teachers from different educational institutions and found that teachers perceived Facebook as an effective educational tool because it improved communication, increased student engagement, and facilitated the sharing of multimedia instructional resources. Nevertheless, teachers also identified distractions and privacy concerns as challenges associated with Facebook use in education.

Furthermore, Nicholas, Rouse, and Garner (2023) investigated how teachers from different educational sectors collaborated through a dedicated Facebook group. Their study found that Facebook promoted inter-organizational professional learning by enabling teachers to exchange ideas, discuss educational challenges, and support pupils' transition between school levels. The researchers concluded that Facebook fostered professional networking and collaborative problem-solving among teachers. Overall, empirical evidence suggests that teachers utilize Facebook to facilitate communication, collaborative learning, resource sharing, online instruction, and professional development. Despite concerns about privacy and distractions, Facebook remains a widely used social media platform for enhancing teaching and learning processes.

Advantages of Teachers' Use of Facebook in Teaching

In evaluating the positive contributions of Facebook in teaching, (Greenhow & Lewin, 2016; Tess, 2013; Aydin, 2012; Dhawan, 2020; Trust, 2017) summarized as follows:

- I. Improved Communication: Facebook enables teachers to communicate quickly with students and parents through groups, chats, and announcements. Important academic information can easily be shared outside classroom hours

- ii. **Enhanced Collaboration and Interaction:** Teachers use Facebook discussion groups to encourage collaborative learning, group assignments, and peer interaction. Students can exchange ideas and participate actively in discussions
- iii. **Easy Sharing of Learning Materials:** Teachers can upload videos, lecture notes, images, links, and assignments on Facebook, allowing students to access learning resources anytime and anywhere
- iv. **Increased Student Engagement:** The interactive nature of Facebook motivates students to participate more in academic activities through comments, reactions, and online discussions
- v. **Support for Online and Distance Learning:** Teachers can conduct virtual lessons through Facebook Live and private groups, making learning possible during emergencies such as the COVID-19 pandemic
- vi. **Professional Development Opportunities:** Teachers join educational communities on Facebook to share teaching experiences, learn innovative strategies, and collaborate with educators globally

Disadvantages of Teachers' Use of Facebook in Teaching

On the contrary, (Kirschner & Karpinski, 2010; Rosenberg & Asterhan, 2015; Aydin, 2012) identified the following setbacks against Facebook usage in teaching;

- I. **Distraction from Academic Activities:** Students may become distracted by entertainment content, games, and non-academic conversations while using Facebook for learning purposes
- ii. **Privacy and Security Concerns:** Teachers may face challenges in maintaining professional boundaries and protecting personal information when interacting with students on Facebook
- iii. **Cyberbullying and Misuse:** Facebook can expose students and teachers to cyberbullying, harassment, and inappropriate comments that may negatively affect the learning environment
- iv. **Internet Connectivity Problems:** Effective use of Facebook in teaching depends on stable internet access and digital devices, which may not be available to all students and teachers, especially in developing countries.
- v. **Time Consumption:** Teachers may spend excessive time managing online discussions, responding to messages, and monitoring activities on Facebook, which can reduce productivity.
- vi. **Reduced Face-to-Face Interaction:** Overdependence on online communication may reduce direct classroom interaction and affect students' social and communication skills.

Using the X App (formerly Twitter.com)

Globalization has resulted in enhanced technology, with social media being the second most important reference for students in their learning environment behind books. Social media

integration in education is a relatively new concept for educators. X has continued to influence teaching and learning by helping teachers communicate, collaborate, and access educational resources in real time (Mandy & Mok, 2024). Although the platform has undergone major changes since its rebranding from Twitter to X, recent educational studies show that many teachers still use it for professional learning, classroom interaction, and instructional support. It is used to facilitate the learning process and as a communication medium between students and instructors, enabling them to discuss issues outside class time. The above authors pointed out a set of features that characterize the X app which include: It is considered an effective tool for communicating, as it enables the user to make friends with different personalities and from multiple places around the world. It is easy and fast. In order to join, it only requires the individual to login into the e-mail and record the username and password. The user can view his/her various experiences, and he/she can review the experiences of others and benefit from them. Sending blogs via Twitter is free, unlike SMS via phones.

Additionally, Alshaye, Tasir and Jumaat (2023) believed that X usage can be linked to videos, pictures, and links to more expansive blogs and other websites to enhance students' understanding and that social media app such as X have skyrocketed in popularity over the past few years. To them, social media applications have been widely used by students and instructors as teaching and learning tools. In response to the increasing use of Twitter in the educational field, (Azih & Onyeyirichi, 2023) conducted a meta-analysis to provide empirical evidence concerning the impact of X on student engagement and achievement and recommended that X is helpful in enhancing engagement and collaboration among peers, teachers, and students.

Also, in using a self-structured questionnaire in determining the influence of X usage and academic performance of accounting education undergraduates in public universities questionnaire, Azih & Onyeyirichi, (2023) utilized computed means and standard deviations to generate a result which shows X usage influencing the academic performance of accounting education undergraduates in public universities in Abia State positively. Based on the above findings, it was recommended, among others, that University management should institute mechanisms to encourage the use of X by the students in the school. On the other hand, the study also highlighted the negative aspects of incorporating X in the educational context to include; inappropriate usage, over exposure, reputation, information overload, addiction, as well as other issues associated with the content and personal privacy. It recommended that therefore that its usage must be controlled. Another draw backs of this site is that each tweet is limited to 140 characters, and this makes it difficult for individuals to express their own thoughts within this limited number of characters (Malik et al., 2019)

Advantages of using the X App in teaching

Various authors particularly (Abdulhamid & Saadu, 2025) has credited the deployment of X by teachers towards enhancing their effectiveness. The points below are worth noting:

- I. **Enhancing Communication between Teachers and Students:** Teachers can use X to share classroom announcements, reminders, assignment instructions, and educational updates quickly. The platform allows teachers to communicate with students beyond the physical classroom through posts, replies, and hashtags. This improves classroom interaction and helps students remain connected to academic activities even outside school hours
- ii. **Supporting Professional Development:** One of the major educational benefits of X is its ability to connect teachers worldwide through online professional communities. Teachers participate in educational discussions using hashtags such as #Edchat, #EdTech, and subject-based communities where they exchange teaching ideas, lesson strategies, and classroom experiences. Recent research in Germany found that teachers' participation in online X communities supports informal professional learning and collaborative practice among educators.
- iii. **Providing Access to Educational Resources:** Teachers use X to access educational materials such as lesson plans, instructional videos, scholarly articles, teaching tips, and classroom activities shared by schools, universities, and educational organizations. This immediate access to updated educational content helps teachers improve lesson delivery and classroom effectiveness.
- iv. **Encouraging Student Engagement and Participation:** The interactive nature of X allows teachers to involve students in classroom discussions, debates, polls, and collaborative learning activities. Instructors can create hashtags for specific courses or assignments, enabling students to contribute ideas and respond to classmates' opinions in real time. Studies have shown that integrating X/Twitter into instruction can improve student engagement and participation in classroom activities.
- v. **Promoting Collaborative Learning:** X encourages collaborative learning by allowing students and teachers to interact openly on educational topics. Students can work together on projects, share information, and participate in academic discussions. Teachers can also collaborate with colleagues globally to exchange best practices and innovative teaching methods.
- vi. **Developing Digital Literacy Skills:** Using X in the classroom helps students develop digital literacy and responsible social media communication skills. Teachers can guide students on how to evaluate online information, communicate respectfully, and practice digital citizenship. These skills are essential in today's technology-driven society.
- vii. **Connecting Learning to Current Events:** X provides real-time information about global events, politics, science, business, and social issues. Teachers can use current discussions and trending topics on the platform to make classroom lessons more practical and relevant. Subjects such as government, economics, and history become more engaging when linked to real-world events shared on X.

- viii. **Improving Concise Writing and Critical Thinking:** Since X posts are brief, students are encouraged to express ideas clearly and concisely. Teachers can use short writing exercises, reflections, or discussion prompts on the platform to improve students' communication and critical thinking abilities. Educational research has shown that structured X/Twitter activities can enhance students' understanding and classroom participation.
- ix. **Challenges Teachers Should Consider:** Despite its educational benefits, teachers must carefully supervise the use of X in classrooms. Recent studies and public discussions have raised concerns about misinformation, online harassment, inappropriate content, and changing platform policies. Some educational communities have reduced their activity on X due to these concerns. Teachers should therefore establish clear rules for responsible use and monitor students' online interactions carefully. The use of the X app as a social media application can greatly assist teachers in the classroom by improving communication, increasing student engagement, supporting collaborative learning, and providing access to educational resources. It also promotes professional development and digital literacy among both teachers and students. However, teachers must ensure responsible and guided use of the platform to maximize its educational value while minimizing potential risks.

Using the WhatsApp in teaching

Instant messaging platforms have significantly transformed the way we interact in personal and professional settings, and their impact on the educational environment has not been minor. Among these platforms, WhatsApp has stood out for its ease of use, availability, and mass adoption, both in social and academic contexts. [Slakmon \(2024\)](#) upholds that as educational institutions adopt technologies to facilitate distance learning, WhatsApp has become a key tool for communication between students and teachers, as well as a pedagogical resource for the development of collaborative learning. WhatsApp is gradually emerging as a fast and effective communication platform that, being present in the daily lives of most students, offers an accessible way to connect students with each other and with their teachers in real time ([Hadiyana Fahrurrozi and Fakhri 2024](#)). The use of WhatsApp in education has been particularly relevant during crisis situations such as the COVID-19 pandemic, when limitations on face-to-face contact increased the demand for virtual communication tools.

According to Desselle (2017), WhatsApp is one of the most prominent social media sites, as it is an easy way for communication between individuals and groups without any obstacles or barriers. WhatsApp is free of cost, i.e., it is available to all individuals who can download this application on their mobile phones. WhatsApp also allows for the creation of groups and addition of members to them; this allows for the possibility of communicating with more than one individual at the same time. To Backlinko, (2025), the number of WhatsApp users in the world as at August 2025 was over 3 billion. There were online universities already

using and benefiting from WhatsApp. Abu Alruz, (2014) emphasized that WhatsApp groups facilitate the communication between students and teachers thus cultivates a trustworthy environment and increases the interest of the students in learning activities

WhatsApp was one of the online social media tools used in various countries during the COVID 19 era. In Pakistan for instance WhatsApp was used to teach at all levels of learning (Abdullah, 2020). This method of teaching is relatively niche in Pakistan; the acceptance and effectiveness of this mode is yet to be empirically validated. Teachers on the other hand can send both recorded and live video lectures. The assessments and progress reports can be shared with students and parents. Student attendance can be monitored and parents can be brought on board in case there is a lack of participation by students. (Durgungoz & Durgungoz, 2022) feels that parents can conveniently use WhatsApp to learn about the academic activities and achievements of their children. WhatsApp also works equally well in mobile phones of different qualities and brands and functions the same in Android, and Windows. WhatsApp provides an equal learning opportunity to students of all types, genders, ethnicities, and other demographic subgroups

According to ([Suárez-Lantarón et al. 2022](#)), One of the main advantages of WhatsApp in educational settings is its ability to facilitate synchronous and asynchronous learning, allowing real-time communication, sending and receiving text messages, images, audio messages, videos, documents, user locations, contacts, and the creation of groups where doubts can be resolved, materials can be shared, and activities can be coordinated quickly and efficiently. Furthermore, unlike other more formal educational management platforms, WhatsApp is easy to use, as most students are already familiar with the application in their daily lives. This significantly reduces technological barriers, promoting greater participation and accessibility ([Lee et al. 2023](#); [Casillas-Martín et al. 2021](#)). The study also shown that WhatsApp also enhances collaborative learning by fostering more fluid and constant interaction outside the traditional classroom environment. Students can share ideas, reflections, and study materials in a more informal and relaxed environment, contributing to greater participation and the development of self-management skills in learning; (Suárez-Lantarón et al., 2022). This type of interaction, which blurs traditional hierarchical barriers between teacher and student, is crucial in distance education environments, where students may experience isolation or lack of feedback.

[Yu & Motlhabane 2022](#); [García Ávila & Camacho 2023](#) opined that the adoption of WhatsApp in educational settings may vary depending on socio demographic factors like gender, etc. Although some studies suggest that younger students are more receptive to the use of mobile technologies, others indicate that WhatsApp, being such a widely used platform, has managed to overcome generational gaps, being positively valued by students of different ages). Regarding gender differences, it has been documented that women tend to

participate more actively in virtual collaborative environments, which could be reflected in a higher appreciation of the use of WhatsApp in the educational context.

[Casillas-Martín et al. \(2021\)](#) reported that another important feature of WhatsApp is its ability to create working groups, which has proven to be particularly effective in fostering closer and more collaborative interaction between students. In this sense, WhatsApp not only acts as an instant messaging platform but also becomes a virtual space with varying numbers of participants for the development of collective learning, aligned with the principles of connectivism which emphasize that learning is no longer an individual process but occurs through connection and networked collaboration with other people and sources of information. [Suárez-Lantarón et al. \(2022\)](#).) However revealed that, using WhatsApp is not without its challenges. Despite its numerous advantages, some studies have pointed out that its informal nature can lead to distractions or blur the boundaries between academic and personal life, affecting students' concentration and ability to maintain effective time management Furthermore, unlike educational management platforms such as Moodle or Canvas, WhatsApp is not specifically designed for the structured organization of academic content, which may limit its use in more complex activities or in the delivery of large-scale assignments.

Furthermore, [Lee et al. \(2023\)](#), submitted that given the growing importance of WhatsApp in the educational field and the need to explore its impact in distance education contexts, it is crucial to conduct studies that analyze how this platform is perceived by teachers and students alike and what factors influence its effectiveness as an academic support tool in distance studies. WhatsApp's accessibility, combined with its ability to foster collaboration, interaction, and self-directed learning, positions it as a tool that can significantly contribute to improving teaching and learning processes in virtual environments.

In another dimension, Singh, (2020) opined that WhatsApp partnered with the [World Health Organization](#) and [UNICEF](#) to provide messaging hotlines for people to get information on the [COVID-19 pandemic](#).. In the same month, WhatsApp began testing a feature to help users find out more information and context about information they receive to help combat misinformation. In January 2021, WhatsApp announced a controversial new [privacy policy](#) allowing WhatsApp to share data with its parent company, Facebook. This led many users to delete WhatsApp and instead use services such as [Signal](#) and [Telegram](#). Kharpal, Arjun (2021). According to Mehta (2024), WhatsApp introduced several new video calling features, including the ability to select specific participants from a group to make a call, rather than calling all group members. Visual effects also became available, adding visual filters to a user's video feed.

In their investigation of the influence of WhatsApp on the academic performance of students

at the Cross River State University of technology, Ogbudu, Undie and Atsu (2023) recommended that the school administration should have a course on time management taught across all disciplines, as this course would enlighten the students on what they should prioritize. Hence, they would be able to strike a balance on the period used on WhatsApp for scholarly work and for leisure. This will ultimately reduce the incidences of abuse of the platform

Statement of the Problem

Generally, it is believed that social media networks, which are essential tools in the current era, have brought several positive or negative changes in all areas of life, uses are no longer limited to connections and communication between individuals, but far exceed that, when educational institutions and universities started using them as effective means of connection and a mechanism for communication between the parties (teacher and student) in the educational process. This added to the process an interactive and vital character which is not provided in classical education. The quick spread of technology and social media has changed all ways of teaching. First, as a teacher, social media occupy a large amount of space in both students' and teachers' lives. This status of social media among parties of the educational process has motivated the researcher to investigate the role that the social media applications can play in improving and developing the whole process of teaching and learning. This study therefore investigated the impact of the commonly used social media tools such as; Facebook, X (formerly twitter) and WhatsApp teaching pedagogy.

Purpose of the Study

The study aimed at investigating the utilization of social media applications in improving teaching. Specifically, it sought to:

1. Investigate the significance of Facebook (facebook.com) usage in the performance of secondary school teachers
2. Find the impact of Twitter.com (currently X) application in the performance of secondary school teachers
3. Determine the role of WhatsApp media application in facilitating teachers' performance at the secondary school level

Research questions of the Study

1. What is the significance of using Facebook (facebook.com) application in teaching teachers?
2. What is the role of X application in teaching by school teachers?
3. What role does WhatsApp play in teaching by secondary school teachers?

Research hypotheses

1. There is no significant relationship between Facebook usage as a social media tool and teachers' performance in Secondary Schools

2. There is no significant relationship between the use of the X app and teachers' performance in Secondary Schools
3. Using WhatsApp has no significance relationship with teachers' teaching ability in Secondary schools

Methodology

The survey design was used for this study. It involved the collection of data to accurately describe existing phenomena. Studies that make use of this approach are employed to obtain a picture of the present condition of a particular phenomenon, hence teachers are already using social media applications. The area of study was Calabar South Local Government Area. Calabar South is one of the Eighteen Local Government Areas of Cross River State. The sampling technique adopted for this study was the simple random sampling technique. The study sample comprised eighty-seven (87) Senior Secondary Two (SS II) teachers randomly selected from a population of 887 involving four (4) public secondary schools within the study area. The simple simply technique utilized the "hat and draw" balloting method with the inscription "Yes" and "No" written on pieces of papers according to select both the schools and the number of teachers in a container. Each school within the area of study had equal chances of being selected for the study and the researcher had to pick these schools with replacement. The same treatment was given to the teachers.

Two instruments were used. The first was the Using Social Media Applications Questionnaire (USMAQ). This instrument was designed by the researcher around the objectives and research questions and was validated by two experts in Measurement and Evaluation. This instrument contain items that measures the use of Social Media applications, specifically Facebook, X and WhatsApp. Items were formulated under a 4-point Likert scale ranging from Strongly Agree (SA), Agree (A), Strongly Disagree (SD) and Disagree (D). The second instrument was the Teachers' Performance Rating Scale (TPRS) used in teaching Economics. After receiving all entries from the 87 participating teachers, the researchers then subjected the data analysis using the Pearson Product Correlation Statistical tool since the aim was to establish the possible relationship between the variables. The results obtained are as shown the tables below:

H_{01} : "There is no significant relationship between the use of Facebook social media application and secondary school teachers.

In order to test this hypothesis, the independent variable, (Facebook application) was correlated with the dependent variable (teachers' performance) using the Pearson product moment correlation analysis and the result of the analysis is presented in Table 1.

Table 1: Pearson product moment correlation analysis of relationship between the use of Facebook Application and teachers' performance (N=87)

Variables	$\sum X$ $\sum Y$	$\sum X^2$ $\sum Y^2$	$\sum XY$	r-value
Facebook application	2811	4765	68172	0.60*
Teachers' performance	2534	4685		

*Significant at .05 level, critical $r=.159$, $df=85$

The result of the statistical analysis presented in Table 1 shows that the calculated r-value of 0.60 is greater than the critical r-value of .159 at .05 levels of significance with 85 degrees of freedom. The result is significant and the null hypothesis was rejected. This implies that there is a significant relationship between the use of Facebook Social Media application and teachers' teaching skills or performance within the area of study.

H_{02} : "There is no significant relationship between the use of X app (formerly Twitter) and teachers' performance. In order to test this hypothesis, the independent variable (X app) was correlated with the dependent variable (teacher's performance) using the Pearson product moment correlation analysis. The result of the analysis was presented in Table 2.

Table 2: Pearson Product Moment Correlation Analysis of the relationship between the use of X app (formerly Twitter) and teachers' performance in secondary (N=87)

Variables	$\sum X$ $\sum Y$	$\sum X^2$ $\sum Y^2$	$\sum XY$	r-value
Use of X application	2779	4689	65907	0.53*
Teachers' performance	2534	4685		

*Significant at .05 level, critical $r=.159$, $df=85$

The result of the statistical analysis presented in Table 2 indicated that the calculated r-value of 0.53 was greater than the critical r-value of .159 at .05 levels of significance with 85 degrees of freedom, making the result significant. The null hypothesis was rejected, implying that there is a significant relationship between the use of the X app and teachers' performance in Economics.

H_{03} : There is no significant relationship between the Use of WhatsApp social media application and teachers' performance. The independent variable (WhatsApp application) was correlated with the dependent variable (teachers' performance) and analyzed with the Pearson Product Moment Correlation Analysis. The result of the analysis is presented in Table 3.

Table3: Pearson Product Moment Correlation Analysis of the relationship between the Use of WhatsApp and teachers' performance in Economics (N=87)

Variables	$\sum X$ $\sum Y$	$\sum X^2$ $\sum Y^2$	$\sum XY$	r-value
Use of WhatsApp	2779	4676	69071	0.75*
Teachers' performance	2534	4685		

*Significant at .05 level, critical $r=.159$, $df=85$

The result of the statistical analysis presented in Table 3 indicates that the calculated r-value of 0.75 is greater than the critical r-value of .159 at .05 level of significance with 85 degrees of freedom, making the result significant, thus rejecting the null hypothesis. This implies that there is a significant relationship between the Use of WhatsApp and teachers' performance in Secondary Schools.

Discussion

In the first hypothesis for instance, there is a significant relationship between the use of Facebook application and teachers' performance in the area of study. This finding is supported by the result of a study by (Bicen and Uzunboylu 2013), where teachers utilized Facebook in teaching and learning through communication, collaboration, instructional delivery, and professional development. The study went further to indicate that Facebook supports interaction between teachers and students, enhances collaborative learning, and improves access to educational resources. It also showed how teachers used Facebook in blended and online learning environments. The researchers studied 71 teachers from primary and secondary schools and found that teachers used Facebook to share learning materials, cooperate with colleagues, and participate in online discussions.

The findings from this hypothesis is also collaborated by the work done by Rosenberg and Asterhan (2015) who explored teacher-student interactions on Facebook among secondary school teachers. Using surveys and interviews, the researchers discovered that teachers used Facebook for instructional communication, psycho-pedagogical support, and relationship building with students. The finding also aligned with the work done by (Husin & Ali, 2022) that examined teachers' perspectives on Facebook in teaching and learning wherein the study involved 80 teachers from different educational institutions and found that teachers perceived Facebook as an effective educational tool because it improved communication, increased student engagement, and facilitated the sharing of multimedia instructional resources. The result of this hypothesis is equally upheld by Nicholas et al, (2023). They reported on how teachers from different educational sectors collaborated through a dedicated Facebook group. Their study found that Facebook promoted inter-organizational professional learning by enabling teachers to exchange ideas, discuss educational challenges, and support pupils' transition between school levels. The researchers concluded that Facebook fostered professional networking and collaborative problem-solving among teachers.

The second hypothesis established a positive significant relationship between the X app and teachers' performance. This finding is in line with the work done by (Azih & Onyeyirichi, 2023), where in using a self-structured questionnaire to determine the influence of X usage and academic performance of accounting education undergraduates in public universities questionnaire, utilized computed means and standard deviations to generate a result which shows X usage influencing the academic performance of accounting education undergraduates in public universities in Abia State positively and went on to recommend, among others, that University management should institute mechanisms to encourage the use of X by the students in the school. Again, the finding agrees with (Alshaye, Tasir & Jumaat (2023) who report study that X usage can be linked to videos, pictures, and links to more expansive blogs and other websites to enhance students' understanding and that social media app such as X have skyrocketed in popularity over the past few years. To them, social media applications have been widely used by students and instructors as teaching and learning tools.

The third hypothesis showed a significant relationship between WhatsApp and teacher performance. The result conforms with the result by (Durgungoz & Durgungoz, 2022) who reported that parents can conveniently use WhatsApp to learn about the academic activities and achievements of their children. WhatsApp also works equally well in mobile phones of different qualities and brands and functions the same in Android, and Windows. WhatsApp provides an equal learning opportunity to students of all types, genders, ethnicities, and other demographic subgroups. The findings are equally collaborated by ([Suárez-Lantarón et al. 2022](#)) who see one of the importance of WhatsApp in teaching to be its ability to facilitate synchronous and asynchronous learning, allowing real-time communication, sending and receiving text messages, images, audio messages, videos, documents, user locations, contacts, and the creation of groups where doubts can be resolved, materials can be shared, and activities can be coordinated quickly and efficiently. The finding of this hypothesis also agrees with the work done by Desselle (2017), who opined that WhatsApp groups facilitate the communication between students and teachers thus cultivates a trustworthy environment and increases the interest of the students in learning activities. The researchers revealed that there are different ways and means of teaching at various levels of educational institutions particularly during the COVID 19 pandemic and WhatsApp was one of such means.

Conclusion

The primary purpose of this study was to investigate the relationships between social media applications and teachers' performance in schools. All the hypotheses have shown from their results that there are significant relationships between the dependent and independent variables. The concern of the researchers was the usage of Facebook, X- app (formerly Twitter) and WhatsApp. The findings from the study indicate as follows:

1. There is a significant relationship between the use of Facebook Application and teachers' performance in Junior Secondary Schools in Calabar South Local Government of Cross River State, Nigeria.

2. There is a significant relationship between the use of X Application and teachers' performance in Junior Secondary Schools in Calabar South Local Government of Cross River State, Nigeria.
3. There is a significant relationship between the use of WhatsApp Application and teachers' performance in Junior Secondary Schools in Calabar South Local Government of Cross River State, Nigeria.

Recommendations

The following recommendations were advanced to guide future researchers:

1. Schools should be encouraged to embrace the integration of social media applications into teaching and learning so as to enhance collaborations and fast instructional management processes
2. There is need to self-cultivate and self-regulate the use and learning of social media skills among teachers to balance their teaching skills and perform other academic and digital engagements.
3. Future studies should at a broader, sample and study area for a more generalized conclusion

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